DR. SHRADDHA JOSHI

NTET SUCCESS MANUAL

NATIONAL TEACHER ELIGIBILITY TEST

CHAUKHAMBA

INDIAN SYSTEM OF MEDICINE (AYUSH)

NATIONAL TEACHER ELIGIBILITY TEST

NTET

SUCCESS MANUAL

DR. SHRADDHA JOSHI

FOR ASPIRING TEACHERS OF THE INDIAN SYSTEM OF MEDICINE (AYUSH)

Highlights:

- Strictly aligned with NCISM curriculum covering the complete theory in a systematic, exam-oriented manner.
- Self-explanatory illustrations for visual learning, comparison tables, & chapter-wise MCQs for conceptual understanding.
- High-yield one-liners for quick revision, along with previous years' NTET question papers for understanding the exam pattern.
- 1000+ practice questions for comprehensive self-assessment, concept reinforcement, and confident NTET preparation.

Dr. Shraddha Joshi is a distinguished academician and clinician in the field of Ayurveda, with specialized expertise in Shalakya Tantra. She completed her B.A.M.S. from Patanjali Bhartiya Ayurvigyan evam Anusandhan Sansthan (2010–2016), building a strong foundation in classical and contemporary Ayurvedic sciences. She pursued her M.S. in Shalakya Tantra (2017–2020) and subsequently earned her Ph.D. (Ayu.) (2021–2023) from Institute of Teaching and Research in Ayurveda (ITRA), Jamnagar.

Dr. Joshi has consistently demonstrated excellence in academics, research, and clinical practice. She served as an Assistant Professor at an Ayurveda Colleges from 2023 to 2024. Thereafter, she worked as a Medical Officer under the Government of Uttarakhand from 2024 to 2025, effectively integrating clinical service with academic expertise. She is presently serving as an Assistant Professor, contributing actively to teaching, research, and student mentorship. She has presented research papers and posters at 17 national and international conferences and has received three Best Paper Presentation Awards at international platforms. She has published 25 original research articles in reputed, peer-reviewed, Scopus and UGC-listed international journals. To further strengthen her research skills, she has completed certification programs in Research Methodology and Medical Statistics.

Dr. Joshi also serves as a reviewer for reputed journals and contributes as a regular columnist on Eye and ENT topics for The Ancient Ayurveda Magazine. She is the author of the published book Research Methodology, Medical Statistics & Teaching Aptitude , published by Chaukhamba Surbharati Prakashan, a comprehensive and widely appreciated academic resource for undergraduate, postgraduate, and research scholars.

She can be reached through her email id <drsjoshi1993@gmail.com>

ABOUT THE BOOK

Ayurveda NTET Success Manual has been thoughtfully designed as a complete companion for aspirants preparing for the National Teachers Eligibility Test (NTET) in Ayurveda. The book brings together comprehensive theory based on the prescribed NTET syllabus with a clear, exam-oriented approach. Each chapter is supported by carefully designed MCQs for concept reinforcement, self-explanatory illustrations for easier visual learning, high-yield one-liners for rapid revision, and comparison tables that simplify important and often-confusing concepts. To bridge the gap between learning and actual examination practice, the book also includes previous years' NTET question papers from 2024 to 2026, along with 1000+ practice questions for effective self-assessment. More than just a question bank, this manual is designed to guide aspirants through the complete journey of learning, understanding, revising, practising, and preparing confidently for NTET.

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ISBN : 978-93-49703-90-2
₹650.00

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1 Teaching and Training

1.1 Teaching: Concept, Objectives, Levels of teaching (Memory, Understanding and Reflective), Characteristics, and basic requirements.

1.2 Teaching methods, new methods of teaching (approach).

1.3 Utilization of Basic teaching and basic skills of teaching.

1.4 Understanding Learner's characteristics: Characteristics of adolescent and adult learners (Academic, Social, Emotional, and Cognitive), Individual differences.

1.5 Factors affecting teaching related to: Teacher, Learner, Support material, Instructional facilities, Learning environment and Institution.

1.6 Methods of clinical teaching / bedside teaching.

1.7 Learning styles - VARK - Visual, Aural/Auditory, Reading/Writing & Kinesthetic

1.1 TEACHING: CONCEPT, OBJECTIVES, LEVELS OF TEACHING (MEMORY, UNDERSTANDING, AND REFLECTIVE), CHARACTERISTICS, AND BASIC REQUIREMENTS.

1.1 (a) CONCEPTS AND OBJECTIVES OF TEACHING

Teaching is one of the most significant human activities. It is the organized process through which knowledge, skills, values, attitudes, and experiences are transmitted from one person to another. In the educational field, teaching acts as a bridge between the learner and learning objectives. It is not merely telling facts or delivering lectures, but a purposeful and systematic process of guiding learners toward desired behavioral and intellectual changes.

In modern education, teaching is considered a dynamic interaction among the **teacher, learner, and learning environment**. It aims at developing not only academic knowledge but also personality, problem-solving ability, communication skills, and ethical values. Effective teaching therefore plays a crucial role in shaping competent professionals and responsible citizens.

Concept of Teaching

Teaching is the process of helping learners to learn. It involves planning, communication, motivation, guidance, assessment, and reinforcement so that students acquire knowledge and skills successfully. Three important qualities of teaching- Knowledge, communication skills, Aptitude.

Different scholars have explained teaching in various ways:

- Teaching is the **stimulation of learning**.
- Teaching is the **art of assisting discovery**.
- Teaching is the **process of creating conditions for learning**.
- Teaching is the **interactive relationship between teacher and learner**.

Thus, teaching is not limited to classroom lectures; it includes demonstrations, discussions, clinical teaching, mentoring, practical sessions, workshops, and technology-based learning.

Definitions of Teaching

1. **Smith** – Teaching is a system of actions intended to produce learning.
2. **Morrison** – Teaching is an intimate contact between a mature and less mature personality designed to further the education of the latter.
3. **B.O. Smith** – Teaching is a system of activities intended to induce learning.
4. **Modern View** – Teaching is facilitation of learning through planned experiences.

Principles of Teaching

Teaching is an art as well as a science. Effective teaching is guided by certain principles that help learners acquire knowledge, skills, attitudes, and values efficiently.

Table 1: Principles of Teaching

Principle	Meaning	Example in Ayurveda Teaching
Principle of Activity	Learning becomes effective when students actively participate.	Students perform Nadi Pariksha instead of only reading about it.
Principle of Interest	Teaching should arouse and maintain learner interest.	Discussing real clinical cases of Ardita while teaching Shalakya Tantra.
Principle of Linking with Life	Knowledge should be connected with real-life situations.	Explaining Dinacharya through daily lifestyle practices.
Principle of Definite Aim	Every lesson should have clear objectives.	"Students will be able to diagnose Timira after this session."
Principle of Selection	Only relevant content should be selected according to objectives.	Choosing important Netra Rogas for UG students.
Principle of Planning	Teaching should be systematic and organized.	Preparing lesson plans before teaching Panchakarma.
Principle of Division	Content should be divided into manageable units.	Teaching Shalakya in sections: Netra, Karna, Nasa, Mukha.
Principle of Revision	Regular revision strengthens retention.	Weekly quizzes on Dosha-Dhatu-Mala concepts.
Principle of Democratic Dealing	Teachers should encourage participation and respect opinions.	Allowing students to discuss differential diagnosis.
Principle of Motivation	Students should be encouraged to learn.	Appreciating correct clinical findings during demonstrations.
Principle of Recreation	Learning should be enjoyable and stress-free.	Educational games, quizzes, and case-based discussions.
Principle of Individual Differences	Every learner has different abilities and learning speeds.	Providing additional guidance to slow learners.
Principle of Remedial Teaching	Extra teaching should be provided to students facing difficulties.	Remedial sessions for students struggling with clinical examination.
Principle of Sympathy	Teachers should be kind, understanding, and supportive.	Helping students overcome fear during first patient interaction.
Principle of Creativity	Teaching should encourage innovation and independent thinking.	Asking students to design a research proposal on Nasya Karma.
Principle of Reinforcement	Desired learning should be strengthened through rewards and feedback.	Positive feedback after successful procedure demonstration.
Principle of Training the Senses	Learning improves when multiple senses are involved.	Seeing, touching, smelling, and identifying medicinal plants.

Table 2: Classification of Principles of Teaching

Category	Principles Included
Learner-Centered Principles	Activity, Interest, Motivation, Individual Differences, Creativity
Instructional Principles	Planning, Selection, Division, Revision, Definite Aim
Humanistic Principles	Democratic Dealing, Sympathy, Remedial Teaching
Learning Enhancement Principles	Reinforcement, Recreation, Training the Senses
Application-Based Principles	Linking with Life

Nature of Teaching

Teaching has the following characteristics:

- Goal-oriented process
- Planned and systematic activity
- Social and interactive process
- Both art and science
- Continuous and dynamic process
- Learner-centered in modern education
- Involves communication and motivation
- Includes evaluation and feedback
- Promotes behavioral change
- Develops knowledge, skills, and attitudes

Components of Teaching

Teaching mainly includes three components:

1. **Teacher-** The teacher is the guide, motivator, facilitator, and evaluator who organizes learning experiences.
2. **Learner-** The learner is the central figure of teaching. All teaching activities are designed for learner development.
3. **Learning Environment-** It includes classroom, laboratory, clinic, digital platforms, teaching aids, and emotional atmosphere.

Phases of Teaching

1. Pre-active Phase

Planning before teaching:

- Setting objectives
- Preparing lesson plan
- Selecting methods
- Arranging teaching aids

2. Interactive Phase

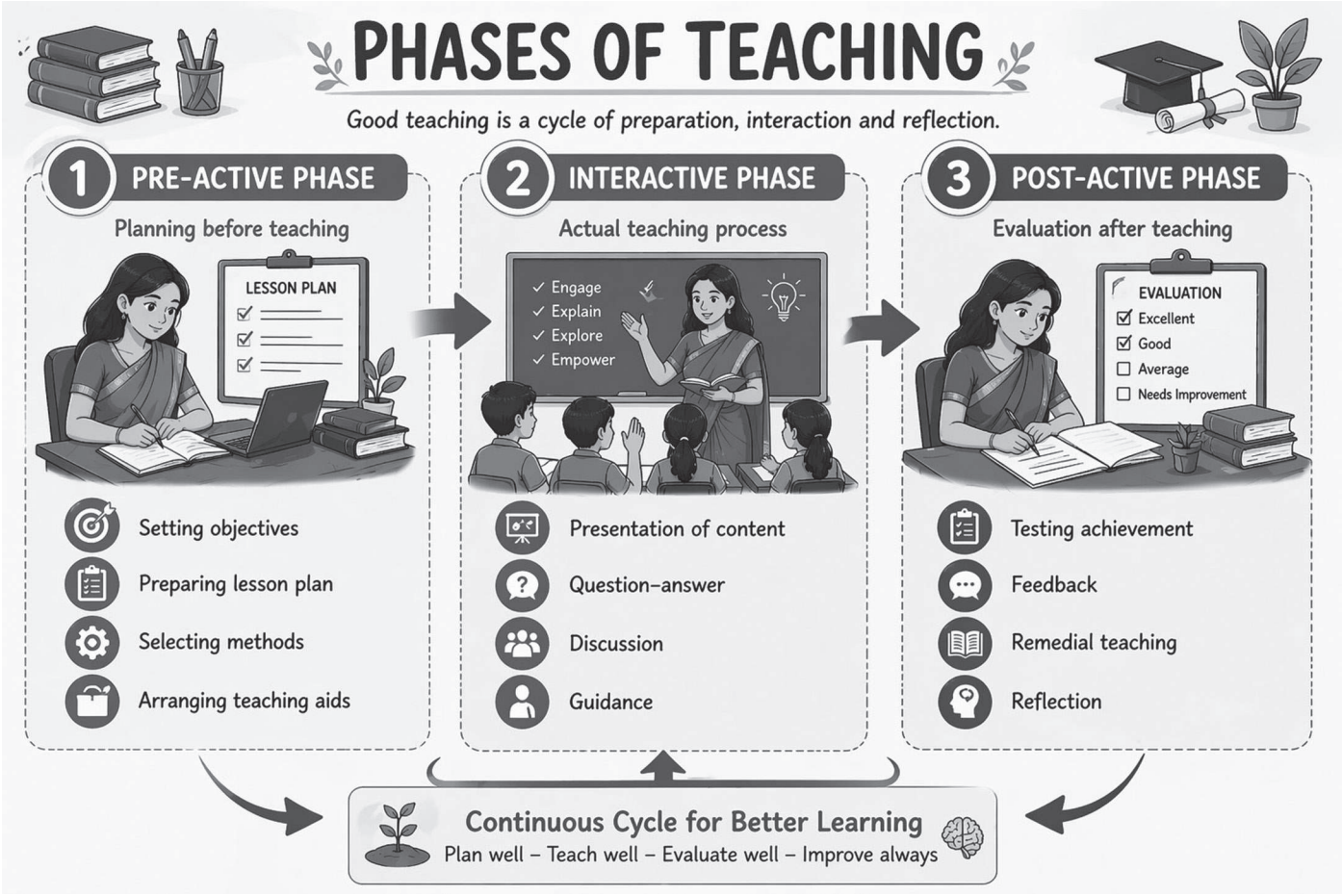
Actual teaching process:

- Presentation of content
- Question-answer
- Discussion
- Guidance

3. Post-active Phase

Evaluation after teaching:

- Testing achievement
- Feedback
- Remedial teaching
- Reflection



1.1 (b) OBJECTIVES OF TEACHING

Teaching objectives refer to the desired outcomes expected after instruction. These objectives guide both teacher and learner.

General Objectives of Teaching

1. **Imparting Knowledge-** To provide factual, conceptual, and theoretical knowledge.
2. **Developing Understanding-** To help learners understand principles, relationships, meanings, and applications.
3. **Skill Development-** To develop practical, clinical, technical, communication, and professional skills.
4. **Developing Attitude and Values-** To cultivate honesty, discipline, empathy, ethics, and social responsibility.
5. **Stimulating Thinking-** To develop reasoning, creativity, analysis, judgment, and problem-solving.

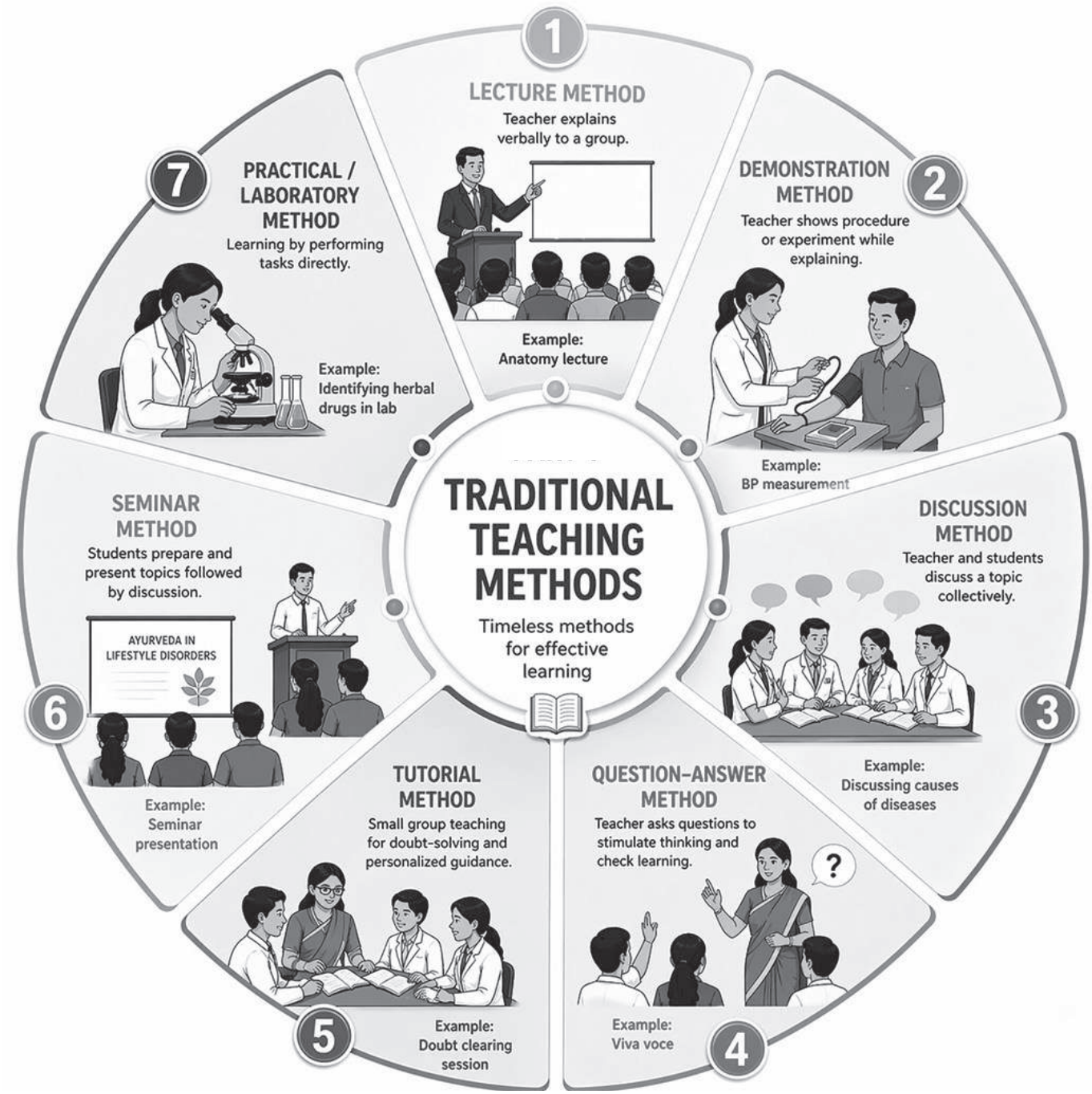


Table 7: Traditional Teaching Methods

Method	Meaning	Merits	Demerits	Example / Best Use
Lecture Method	The teacher explains a topic verbally to a group of students.	Suitable for large classes Time-saving Useful for introducing topics	Passive learning Less interaction Lower retention if overused	**Best Use:** Theory classes, orientation programs, overview of topics
Demonstration Method	Teacher shows a procedure, experiment, or skill while explaining it.	Clear understanding Good for practical subjects Develops observation skills	Requires preparation and resources Limited active participation	**Examples:** BP measurement, laboratory procedures, Panchakarma techniques

Meaning of Factors Affecting Teaching

Factors affecting teaching are the conditions, elements, or variables that directly or indirectly influence the success of the teaching-learning process.

These factors may be related to:

- Teacher
- Learner
- Teaching materials
- Facilities and infrastructure
- Learning environment
- Institutional system

1. Teacher-Related Factors

The teacher is the central guiding force in teaching. Teacher quality greatly affects student learning.

Important Teacher Factors

1. Subject Knowledge

A teacher must possess sound and updated knowledge of the subject.

2. Teaching Skill

Includes explanation, questioning, communication, classroom management, and assessment skills.

3. Personality

Confidence, patience, enthusiasm, leadership, empathy, and discipline influence teaching effectiveness.

4. Communication Ability

Clear language, pronunciation, voice modulation, and listening ability are essential.

5. Attitude Towards Students

Respectful, encouraging, and supportive attitude promotes learning.

6. Motivation and Commitment

Dedicated teachers create positive learning experiences.

7. Professional Development

Continuous learning, training, workshops, and updating knowledge improve teaching quality.

Educational Impact

A competent and motivated teacher inspires learners and improves academic performance.

2. Learner-Related Factors

Teaching becomes effective only when learner characteristics are understood.

Important Learner Factors

1. Intelligence and Ability

Different learners have different grasping capacities.

2. Previous Knowledge

Prior knowledge helps in learning new concepts.

3. Interest and Motivation

Interested students learn better and participate actively.

4. Age and Maturity

Teaching methods differ for children, adolescents, and adults.

5. Learning Style

Visual, auditory, reading/writing, and kinesthetic preferences affect learning.

6. Emotional State

Stress, anxiety, fear, or confidence influence performance.

7. Health and Attendance

Good health and regular attendance improve continuity of learning.

8. Socioeconomic Background

Family support and resources affect learning opportunities.

Educational Impact

Learner-centered teaching must consider individual differences.

3. Support Material Factors

Teaching becomes more effective when supported by proper materials.

Examples of Support Material

- Textbooks
- Reference books
- Charts and posters
- Models and specimens
- Notes and handouts
- Videos and animations
- E-resources
- Case records
- Practical manuals

Characteristics of Good Support Material

- Accurate

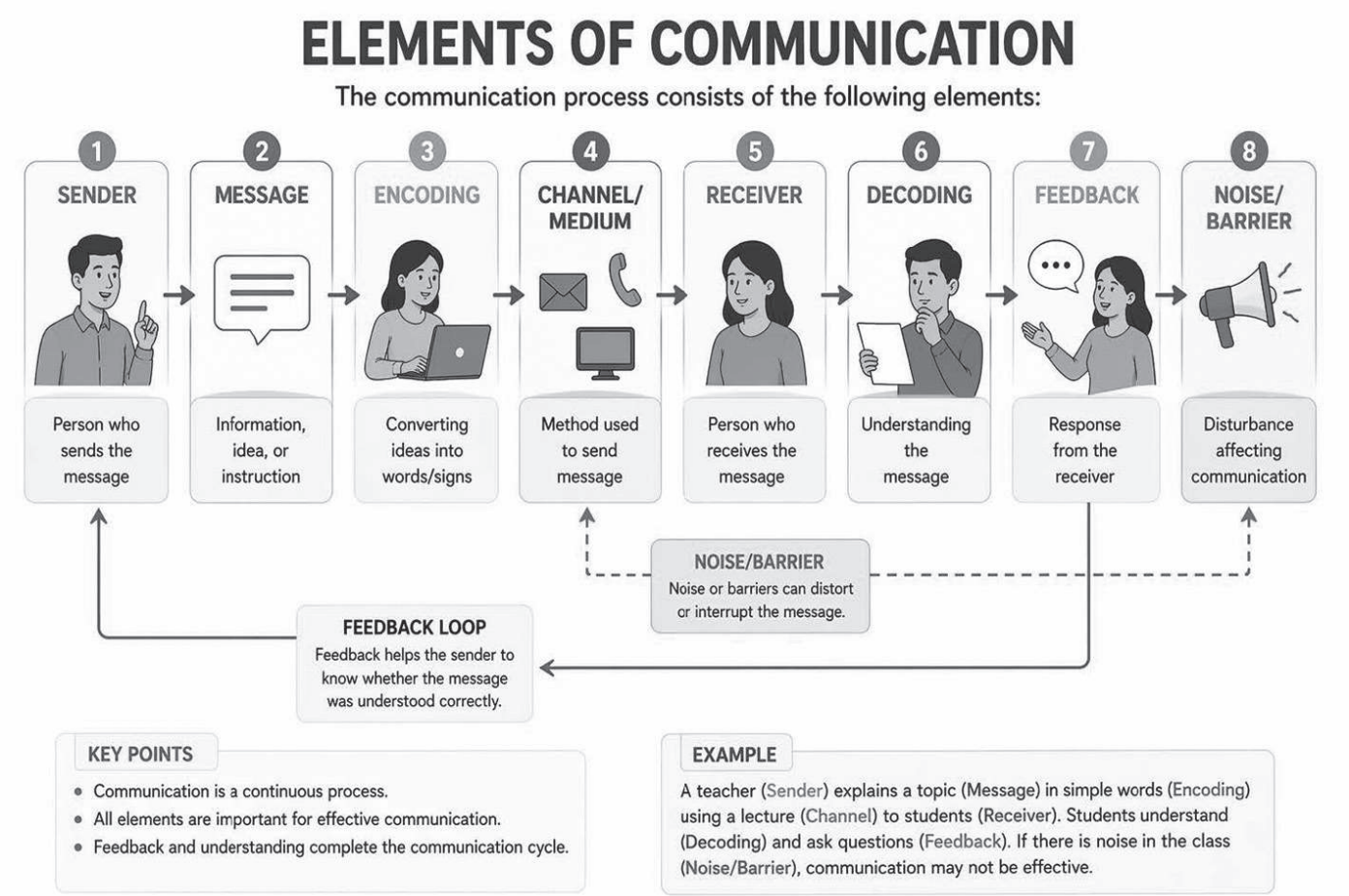
2 Communication

2.1 Communication: Meaning, types, characteristics and purpose of communication.
2.2 Effective communication: Verbal and Non-verbal, Inter-Cultural and group Communications, Classroom communication.
2.3 Barriers to effective communication.
2.4 Mass-Media and Society.
2.5 Teacher-Learner communication.
2.6 Doctor-patient communication.

2.1 COMMUNICATION: MEANING, TYPES, CHARACTERISTICS AND PURPOSE OF COMMUNICATION

Elements of Communication

Communication is an essential process in human life. It is the foundation of teaching, learning, administration, leadership, and social interaction. A successful teacher is not only knowledgeable but also a good communicator. Proper communication helps in creating understanding, solving problems, motivating learners, and maintaining discipline in the classroom.


ELEMENTS OF COMMUNICATION
The communication process consists of the following elements:
1 SENDER
Person who sends the message
2 MESSAGE
Information, idea, or instruction
3 ENCODING
Converting ideas into words/signs
4 CHANNEL/ MEDIUM
Method used to send message
5 RECEIVER
Person who receives the message
6 DECODING
Understanding the message
7 FEEDBACK
Response from the receiver
8 NOISE/ BARRIER
Disturbance affecting communication
NOISE/BARRIER
Noise or barriers can distort or interrupt the message.
FEEDBACK LOOP
Feedback helps the sender to know whether the message was understood correctly.
KEY POINTS
Communication is a continuous process.
All elements are important for effective communication.
Feedback and understanding complete the communication cycle.
EXAMPLE
A teacher (Sender) explains a topic (Message) in simple words (Encoding) using a lecture (Channel) to students (Receiver). Students understand (Decoding) and ask questions (Feedback). If there is noise in the class (Noise/Barrier), communication may not be effective.

Types of Communication

TYPES OF COMMUNICATION

Communication can be classified in various ways.

1 BASED ON MODE OF EXPRESSION

A. Verbal Communication

- Oral – spoken words
- Written – written words

B. Non-Verbal Communication

Without words; uses expressions, gestures, posture, tone, etc.

C. Visual Communication

Through visual aids like charts, diagrams, graphs, posters, PowerPoint, models.

2 BASED ON DIRECTION OF FLOW

A. Downward Communication

From higher authority to lower level.

B. Upward Communication

From lower level to higher authority.

C. Horizontal Communication

Between persons of same level.

D. Diagonal Communication

Between different departments and levels.

3 BASED ON FORMALITY

A. Formal Communication

Official communication through proper channels.

B. Informal Communication

Unofficial communication without formal rules.

4 BASED ON NUMBER OF PERSONS

A. Intrapersonal Communication

Communication within oneself.

B. Interpersonal Communication

Between two persons.

C. Group Communication

Among a small group.

D. Mass Communication

To large audience through media.

Key Point | Different types of communication help us choose the right way to share and understand information effectively.

- **Examples:** Lecture, Explanation, Question-answer, Notes, Assignments

2. Non-Verbal Communication- Communication through expressions and body language.

- **Examples:** Smile, Eye contact, Hand gestures, Nodding, Classroom movement

3. Formal Communication- Official communication in the classroom or institution.

Examples:

- Timetable instructions
- Notices
- Examination guidelines

4. Informal Communication- Friendly and casual interaction.

Examples:

- Personal guidance
- Motivational talk
- Counseling discussion

5. Digital Communication- Communication using technology.

Examples:

- Online teaching
- WhatsApp updates
- Email
- Learning apps

Characteristics of Effective Teacher-Learner Communication

1. Clear and simple language
2. Mutual respect
3. Friendly atmosphere
4. Active listening
5. Student participation
6. Timely feedback
7. Appropriate pace
8. Empathy and patience
9. Confidence
10. Goal-oriented teaching

Importance of Teacher-Learner Communication

1. **Better Understanding-** Students understand concepts clearly.
2. **Motivation-** Encourages students to learn actively.
3. **Confidence Building-** Learners feel comfortable asking questions.
4. **Discipline-** Creates an orderly classroom environment.
5. **Emotional Support-** Students feel guided and respected.
6. **Academic Success-** Improves performance and results.
7. **Strong Relationship-** Builds trust between teacher and learner.

Barriers in Teacher-Learner Communication

- **Physical Barriers-** Noise, Poor seating, Large classroom
- **Language Barriers-** Difficult vocabulary, Poor pronunciation
- **Psychological Barriers-** Fear, Anxiety, Low confidence
- **Personal Barriers-** Lack of interest, Poor listening
- **Technological Barriers-** Poor internet, Device problems

Ways to Improve Teacher-Learner Communication

1. Use simple language
2. Encourage questions
3. Maintain eye contact
4. Listen patiently
5. Give positive feedback
6. Use examples and stories
7. Use teaching aids
8. Respect student differences
9. Create friendly environment
10. Use technology effectively

Communication Skills Needed by Teacher

1. Speaking skill
2. Listening skill
3. Writing skill
4. Reading skill
5. Observation skill
6. Counseling skill
7. Digital communication skill

Role of Feedback in Teacher-Learner Communication

- Feedback helps teachers know whether students understood the lesson.
- **Examples:** Asking questions, Class responses, Written tests, Assignments, Facial expressions

Teacher-Learner Communication in Modern Education

Today communication includes:

- Smart classrooms
- Online learning
- Video lectures

3 Classroom Management

3.1 Classroom Management.
3.2 Practical Classroom Management.
3.3 Psychology & Classroom Management.
3.4 Personal Approach to Classroom Management.
3.5 Ensuring Engagement & Motivation in the Classroom.
3.6 Routines & Technology in the Classroom.
3.7 Forming Positive Learning Environments.
3.8 Disciplinary Problems.
3.9 Management Strategies for Diverse Classrooms.
3.10 Managing classroom and other learning environments (clinical, OPD, Practical labs, skill labs, community outreach).

3.1 CLASSROOM MANAGEMENT

Classroom Management refers to the process of organizing and managing the classroom environment, students, teaching-learning activities, and resources to create an effective learning atmosphere.

Definition

- ● Classroom management is the set of strategies and practices used by teachers to maintain discipline, promote student engagement, and ensure smooth teaching-learning processes.

Objectives of Classroom Management

- Maintain discipline and order.
- Create a positive learning environment.
- Maximize student participation.
- Facilitate effective teaching and learning.
- Develop desirable behavior among students.
- Ensure optimum utilization of time and resources.

Table 1: Components of Classroom Management

Component	Description
Physical Environment	Seating arrangement, lighting, ventilation, cleanliness, teaching aids.
Student Management	Maintaining discipline, motivation, and participation.
Instructional Management	Planning lessons, activities, and assessments.
Time Management	Effective use of classroom time.
Behavior Management	Encouraging positive behavior and minimizing disruptions.

Principles of Classroom Management

- Establish clear rules and expectations.
- Maintain positive teacher-student relationships.
- Encourage active participation.
- Ensure fairness and consistency.
- Use positive reinforcement.
- Promote mutual respect.
- Plan and organize activities effectively.

Strategies for Effective Classroom Management

- Set classroom rules at the beginning.
- Use engaging teaching methods.
- Encourage student interaction.
- Monitor student behavior regularly.
- Provide constructive feedback.
- Use rewards and appreciation.
- Manage transitions smoothly.
- Address problems promptly.

Role of Teacher in Classroom Management

- Planner and organizer.

- Supervisor.
- Facilitator.
- Safety officer.
- Evaluator.

Role of Students

- Follow instructions carefully.
- Participate actively.
- Maintain discipline.
- Handle equipment responsibly.
- Follow safety protocols.
- Record observations accurately.

Principles of Practical Classroom Management

- Learning by doing.
- Student-centered approach.
- Safety first.
- Active participation.
- Individual attention.
- Continuous supervision.
- Constructive feedback.

Challenges

- Large student groups.
- Limited equipment.
- Time constraints.
- Safety risks.
- Variable skill levels among students.
- Lack of resources.

Strategies for Effective Practical Classroom Management

- Maintain appropriate teacher-student ratio.
- Use small group teaching.
- Demonstrate before practice.
- Provide clear instructions.

IMPORTANT POINTS OF PRACTICAL CLASSROOM MANAGEMENT
a
ESTABLISH CLEAR EXPECTATIONS
• Set and communicate clear rules and procedures from the beginning.
• Ensure students understand the expectations and consequences for not adhering to them.
CLASS RULES
b
CONSISTENT ENFORCEMENT
• Apply rules consistently and fairly to maintain credibility and respect.
• Follow through with consequences to reinforce the importance of rules.
c
POSITIVE REINFORCEMENT
• Use positive reinforcement to encourage good behavior.
• Praise, rewards, and incentives can motivate students to follow rules and participate actively.
d
PROACTIVE STRATEGIES
• Anticipate potential disruptions and address them before they escalate.
• Use seating arrangements, classroom layout, and engaging activities to minimize behavioral issues.
e
BUILD RELATIONSHIPS
• Develop strong, respectful relationships with students to foster a positive learning environment.
• Show interest in students' lives and provide support when needed.
f
ENGAGE STUDENTS
• Plan lessons that are interesting and relevant to keep students engaged.
• Use a variety of teaching methods to cater to different learning styles and keep students attentive.
g
EFFECTIVE COMMUNICATION
• Communicate clearly and assertively with students.
• Use non-verbal cues and body language to reinforce messages and maintain control.
h
CONFLICT RESOLUTION
• Address conflicts promptly and calmly.
• Use conflict resolution strategies to help students resolve issues constructively.
Good classroom management creates a positive environment where students feel respected, motivated, and ready to learn.

- Ensure adequate materials.
- Use checklists and skill assessment forms.
- Encourage teamwork.
- Monitor continuously

3.3 PSYCHOLOGY & CLASSROOM MANAGEMENT

Psychology plays a vital role in classroom management. Understanding students' behavior, motivation, emotions, social interactions, and cognitive development helps teachers create a positive, disciplined, and effective learning environment. Effective classroom management is not merely maintaining discipline but facilitating meaningful learning and student development.

1. Understanding Student Behavior

Student behavior is influenced by several psychological factors:

- **Motivation**
- **Emotional state**
- **Developmental stage**
- **Personality**
- **Social environment**
- **Learning experiences**

Understanding these factors helps teachers develop effective classroom management strategies.

2. Behavioral Theories in Classroom Management

A. Classical Conditioning

- **Associated Figure:** Ivan Pavlov
- **Concept:** Learning occurs through association between stimuli.

Table 2: Key Terms

Term	Meaning
Unconditioned Stimulus (UCS)	Naturally produces a response
Unconditioned Response (UCR)	Natural response to UCS
Conditioned Stimulus (CS)	Previously neutral stimulus associated with UCS
Conditioned Response (CR)	Learned response to CS

Educational Implications

- Creating positive classroom environments.
- Associating learning with enjoyable experiences.
- Using signals, cues, and routines to manage classroom behavior.

Example: A bell indicating the start of class encourages students to become attentive.

B. Operant Conditioning

- **Associated Figure:** Burrhus Frederic Skinner
- **Concept:** Behavior is shaped by reinforcement and punishment.

Table 3: Key Concepts

Concept	Meaning
Reinforcement	Increases desired behavior
Positive Reinforcement	Adding a reward (praise, certificates)
Negative Reinforcement	Removing an unpleasant condition
Punishment	Decreases undesirable behavior
Positive Punishment	Adding an unpleasant consequence
Negative Punishment	Removing privileges

Educational Implications

- Reward good behavior.
- Use classroom rules consistently.
- Reinforce participation and discipline.
- Develop structured classroom management plans.

Example: Praising students for punctuality encourages regular attendance.

C. Social Learning Theory

- **Associated Figure: A**lbert Bandura
- **Concept:** Students learn by observing and imitating others.

Components

- Observation
- Modeling
- Attention
- Retention
- Reproduction
- Motivation

Educational Implications

- The teacher acts as a role model.
- Encourage peer learning.
- Promote positive social interactions.

Example: Students imitate respectful behavior demonstrated by teachers.

3. Motivation

Motivation is the driving force behind learning and behavior.

4 Assessment Methods

4.1 Concepts and principles of Learning assessment.
4.2 Evaluation in Choice Based Credit System in Higher education.
4.3 Computer-based Testing.
4.4 Consideration of Innovations in evaluation systems.
4.5 Assessment of clinical competence.
4.6 Role of observation and feedback in assessment.
4.7 Structured oral exam, long case, short case and Objective Structured Clinical Exam (OSCE).
4.8 Assessment Types: Formative and summative assessment; periodic assessment etc.

4.1 CONCEPTS AND PRINCIPLES OF LEARNING ASSESSMENT

Learning assessment is a systematic process of collecting, analyzing, and interpreting information about learners' knowledge, skills, attitudes, and competencies. It helps teachers determine whether learning objectives have been achieved and provides feedback for improving teaching and learning.

Assessment is an integral part of the teaching-learning process and should be continuous, objective, and learner-centered.

1. Concept of Learning Assessment

Learning assessment is the process of gathering evidence about students' learning to make judgments regarding their progress, achievement, strengths, and areas needing improvement.

According to NCERT

Assessment is the process of collecting, recording, interpreting, and using information about learners' progress and achievement.

Key Characteristics

- Continuous process
- Goal-oriented
- Evidence-based
- Learner-centered
- Improves learning outcomes
- Provides feedback to teachers and learners

2. Components of Learning Assessment

Component	Description
Learning Objectives	Expected learning outcomes
Assessment Tools	Tests, quizzes, observations, assignments
Evidence Collection	Gathering learner performance data
Interpretation	Analyzing results
Feedback	Communicating strengths and weaknesses
Decision Making	Planning further teaching strategies

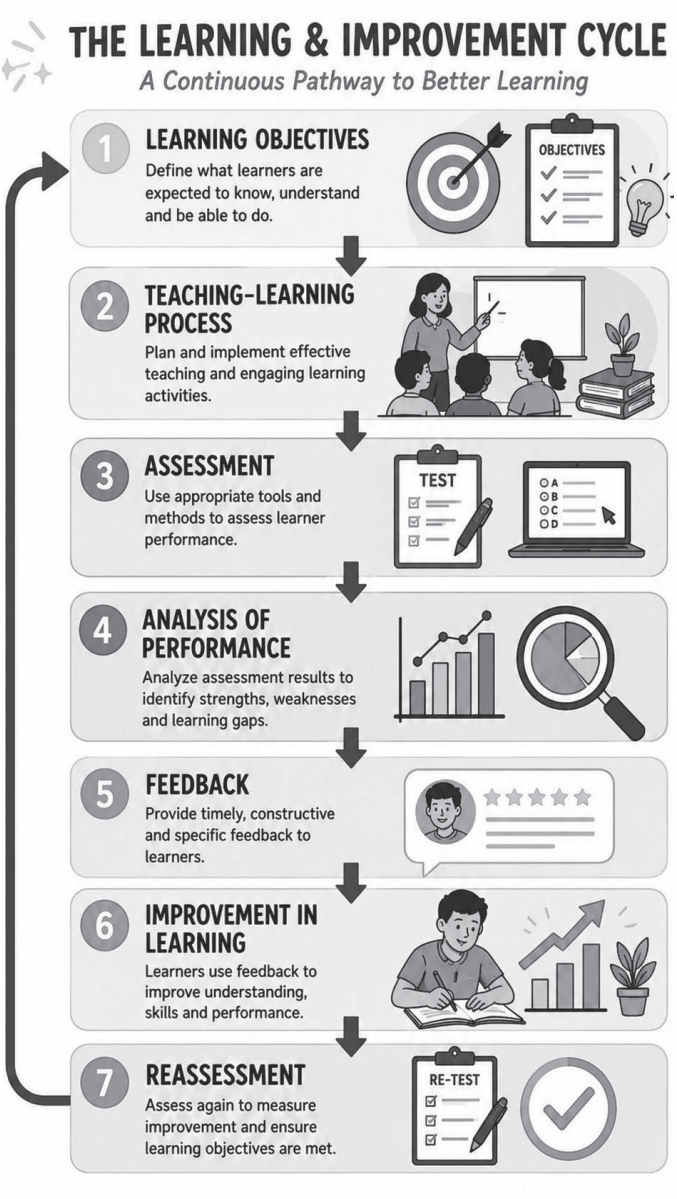
3. Purposes of Learning Assessment

Purpose	Explanation
Diagnostic	Identifies learners' strengths and weaknesses before instruction
Formative	Monitors progress during learning
Summative	Evaluates achievement at the end of instruction
Placement	Places learners at appropriate levels
Guidance	Helps educational and career planning
Motivation	Encourages learning and improvement
Certification	Provides formal recognition of achievement

4. Types of Learning Assessment

Type	Purpose	Example
Diagnostic Assessment	Before instruction	Pre-test
Formative Assessment	During instruction	Quiz, class discussion

Learning Assessment Cycle


THE LEARNING & IMPROVEMENT CYCLE
A Continuous Pathway to Better Learning
1 LEARNING OBJECTIVES
Define what learners are expected to know, understand and be able to do.
OBJECTIVES
2 TEACHING-LEARNING PROCESS
Plan and implement effective teaching and engaging learning activities.
3 ASSESSMENT
Use appropriate tools and methods to assess learner performance.
TEST
4 ANALYSIS OF PERFORMANCE
Analyze assessment results to identify strengths, weaknesses and learning gaps.
5 FEEDBACK
Provide timely, constructive and specific feedback to learners.
6 IMPROVEMENT IN LEARNING
Learners use feedback to improve understanding, skills and performance.
7 REASSESSMENT
Assess again to measure improvement and ensure learning objectives are met.
RE-TEST

Modern Principles of Assessment

1. Assessment **for** Learning (Formative)
2. Assessment **of** Learning (Summative)
3. Assessment **as** Learning (Self-reflection)
4. Competency-Based Assessment
5. Outcome-Based Assessment
6. Authentic Assessment
7. Continuous and Comprehensive Assessment

Educational Significance

- Improves teaching effectiveness.
- Enhances student learning.
- Identifies learning gaps.
- Supports individualized instruction.
- Promotes accountability.
- Facilitates competency development.
- Encourages reflective learning.

Quick Revision Table

Principle	Key Idea
Validity	Measures what it should measure
Reliability	Gives consistent results
Objectivity	Free from examiner bias
Fairness	Equal opportunity for all
Practicality	Feasible and economical
Transparency	Clear criteria and procedures
Continuity	Ongoing assessment
Comprehensiveness	Covers all learning domains
Flexibility	Adapts to learner needs
Feedback	Improves future learning

The **five classical principles of assessment** most frequently asked in entrance examinations are:

Validity + Reliability + Objectivity + Practicality + Fairness

These form the foundation of all educational assessment systems.

4.2 EVALUATION IN CHOICE BASED CREDIT SYSTEM IN HIGHER EDUCATION.

The **Choice Based Credit System (CBCS)** is a learner-centered educational framework introduced by the University Grants Commission to provide flexibility, interdisciplinary learning, student mobility, and continuous evaluation in higher education.

CBCS enables students to choose courses according to their interests, earn credits for completed courses, and progress through a credit-based evaluation system. The emphasis is on **continuous assessment, outcome-based education, competency development, and holistic learning** rather than mere examination performance.

Definition of CBCS

CBCS is an educational system in which students:

- **Choose courses from prescribed options.**
- Earn credits for successful completion of courses.
- Accumulate credits over time.
- Transfer credits between institutions.
- Are evaluated through continuous and comprehensive assessment.

Table 1: Objectives of CBCS Evaluation

Objective	Purpose
Flexibility	Allows student choice in learning
Continuous Assessment	Evaluates learning throughout the semester
Outcome-Based Learning	Measures achievement of learning outcomes
Skill Development	Assesses practical and professional competencies
Student-Centered Learning	Promotes active participation
Academic Mobility	Facilitates credit transfer
Transparency	Ensures fair and objective evaluation
Lifelong Learning	Encourages self-directed learning

Key Features of CBCS

1. Semester-based curriculum.
2. Credit-based course structure.
3. Core, elective, and skill-based courses.
4. Continuous Internal Assessment (CIA/CIE).
5. End Semester Examination (ESE).
6. Grading system instead of only marks.
7. SGPA and CGPA calculation.
8. Academic flexibility.
9. Interdisciplinary learning.
10. Outcome-based education.

Components of Evaluation in CBCS

Evaluation generally consists of two major components:

1. Continuous Internal Assessment (CIA/CIE)

Assessment conducted throughout the semester.

Components

- Class tests
- Quizzes
- Assignments
- Seminars
- Presentations
- Case discussions
- Projects
- Practical work
- Attendance
- Viva voce

Purpose

- Monitor learning progress
- Provide continuous feedback
- Encourage regular study habits

Typical Weightage

20–40% of total marks

2. End Semester Examination (ESE)

Assessment conducted at the end of the semester.

Components

- Theory examination
- Practical examination
- Clinical examination
- Viva voce

Typical Weightage

60–80% of total marks

Typical CBCS Evaluation Pattern

Component	Marks
Internal Assessment	30
End Semester Examination	70
Total	100

Example

Internal Assessment = 25/30

End Semester Examination = 60/70

Total = 85/100

Grade = A+

Credit System under CBCS

Meaning of Credit: A credit represents the academic workload assigned to a course.

General Formula

Activity	Credit Allocation
1 Hour Theory per Week	1 Credit
2 Hours Practical per Week	1 Credit

Example

Course	Credits
Anatomy	4
Physiology	4
Practical	2
Seminar	1

Total Credits = 11

Grading System in CBCS

Instead of only marks, learners are awarded grades.

Letter Grade System

Marks (%)	Grade	Grade Point
90–100	O (Outstanding)	10
80–89	A+	9

Methods of Assessing Clinical Competence

1. Written Assessment

Purpose: Assess knowledge and reasoning.

Methods

- MCQs
- SAQs
- LAQs
- Case-based questions
- Modified Essay Questions (MEQ)

Assesses

- Knows
- Knows How

2. Oral Examination (Viva Voce)

Purpose: Assess understanding and application.

Advantages

- Interactive
- Immediate clarification possible

Limitations

- Subjective
- Examiner bias

3. Long Case Examination

Process

Student:

- Takes history
- Presents diagnosis
- Performs examination
- Plans management

Advantages

- Real patient assessment

Limitations

- Variable cases
- Lower reliability

4. Short Case Examination

Process: Assessment of focused clinical skills.

Example

- Eye examination
- Ear examination
- Cranial nerve examination

5. Objective Structured Clinical Examination (OSCE)

A structured assessment consisting of multiple stations where students perform specific clinical tasks.

Characteristics

- Objective
- Structured
- Standardized

Examples

- Visual acuity assessment
- Blood pressure measurement
- Patient counseling

Advantages

- High validity
- High reliability
- Comprehensive assessment

Limitations

- Resource intensive
- Time-consuming

6. Objective Structured Practical Examination (OSPE)

Meaning: Practical counterpart of OSCE used in laboratory and practical settings.

Examples

- Identification of instruments
- Histology slides
- Specimen examination

Advantages

- Objective scoring
- Standardized assessment

7. Workplace-Based Assessment (WPBA)

Meaning: Assessment conducted during actual clinical practice.

Purpose: Evaluate real-world performance.

Methods

- Mini-CEX
- DOPS
- CBD
- MSF

8. Mini-CEX (Mini Clinical Evaluation Exercise)

Meaning: Direct observation of a learner during a clinical encounter.

Assesses

- History taking
- Examination
- Communication
- Clinical judgment
- Professionalism

5 Educational Technologies

5.1 Advancement in educational technologies.

5.2 Information and Communication Technology (ICT): General abbreviations and terminology.

5.3 Usage of Internet, Intranet, E-mail, Audio and Video-conferencing.

5.4 ICT and Governance Methods of teaching in Institutions of higher learning: Teacher-centered vs. Learner-centered methods; Off-line vs. Online methods (Swayam, Swayamprabha, MOOCs etc.).

5.5 Teaching Support System: Traditional, Modern, and ICT based.

5.1 ADVANCEMENT IN EDUCATIONAL TECHNOLOGIES

Education has undergone a significant transformation with the advancement of technology. Traditional chalk-and-board teaching has evolved into technology-enhanced learning environments that facilitate interactive, flexible, learner-centered, and competency-based education. Modern educational technologies improve teaching effectiveness, student engagement, accessibility, and learning outcomes.

Meaning

Educational technology refers to the systematic application of technological tools, digital resources, and scientific principles to improve teaching, learning, assessment, and educational management.

Definition

According to the Association for Educational Communications and Technology (AECT):

"Educational Technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources."

Objectives of Educational Technology

- Improve teaching effectiveness.
- Enhance student engagement.
- Facilitate self-directed learning.
- Support personalized learning.
- Improve assessment and feedback.
- Promote lifelong learning.
- Expand access to education.

Evolution of Educational Technology

Generation	Technology
First Generation	Chalkboard, Charts, Models
Second Generation	Radio, Television
Third Generation	Computers, Multimedia
Fourth Generation	Internet, E-learning
Fifth Generation	Mobile Learning, Cloud Computing
Sixth Generation	Artificial Intelligence, Virtual Reality, Learning Analytics

Table 1: Major Advancements in Educational Technologies

Technology	Meaning	Examples / Applications	Benefits / Functions
E-Learning	Learning delivered through electronic and internet-based platforms.	Online courses, MOOCs, LMS-based learning.	Flexible learning, global accessibility, self-paced study.
Learning Management Systems (LMS)	Software platforms used to manage teaching-learning activities.	Moodle, Google Classroom, Canvas, Blackboard.	Content delivery, assignments, assessments, progress tracking, communication.

ADVANCEMENTS IN EDUCATIONAL TECHNOLOGIES

1 E-Learning

Meaning:
Learning delivered through electronic and internet-based platforms.

Examples:
- Online courses
- MOOCs
- Learning Management Systems (LMS)

Benefits:
- Flexible learning
- Global accessibility
- Self-paced study

2 Learning Management Systems (LMS)

Meaning:
Software platforms used to manage teaching-learning activities.

Examples:
- Moodle
- Google Classroom
- Canvas
- Blackboard

Functions:
- Content delivery
- Assignments
- Assessments
- Progress tracking

3 Mobile Learning (M-Learning)

Meaning:
Learning through smartphones, tablets, and portable devices.

Features:
- Anywhere learning
- Anytime access
- Microlearning opportunities

Examples:
- Educational apps
- Mobile quizzes
- Digital textbooks

4 Multimedia Learning

Meaning:
Learning through audio, video, animations, and graphics in learning.

Benefits:
- Improves retention
- Enhances understanding
- Increases learner engagement

5 Virtual Learning Environment (VLE)

Meaning:
A digital platform that facilitates online teaching and learning.

Examples:
- Virtual classrooms
- Online discussion forums
- Webinars

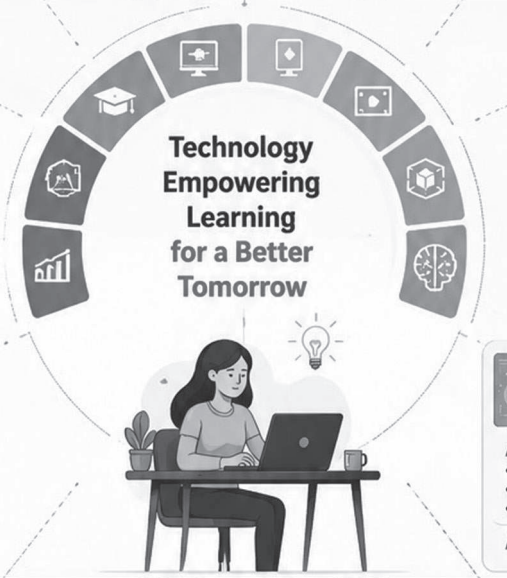
6 Artificial Intelligence (AI) in Education

Meaning:
Application of AI technologies to support learning and teaching.

Applications:
- Intelligent tutoring systems
- Chatbots
- Adaptive learning platforms
- Automated assessment
- Personalized learning

Examples:
- ChatGPT
- AI-based LMS
- Adaptive testing software

Advantages:	Limitations:
• Individualized learning	• Ethical concerns
• Instant feedback	• Data privacy issues
• Learning analytics	• Dependence on technology



7 Learning Analytics

Meaning:
Collection and analysis of learner data to improve learning outcomes.

Uses:
- Monitor student progress
- Identify learning gaps
- Predict academic performance

8 Virtual Reality (VR)

Meaning:
Computer-generated immersive learning environment.

Applications:
- Virtual anatomy laboratories
- Surgical simulations
- Clinical training

Advantages:
- Safe learning environment
- Realistic experiences
- Better skill development

9 Augmented Reality (AR)

Meaning:
Technology that overlays digital information onto the real world.

Applications:
- 3D anatomy visualization
- Interactive models
- Medical training

Example:
Viewing anatomical structures through mobile devices.

10 Simulation-Based Learning

Meaning:
Learning through realistic simulations before real-life practice.

Examples:
- CPR mannequins
- Virtual patients
- Clinical simulators

Importance in Health Education:
- Enhances patient safety
- Improves competency
- Builds confidence

11 Gamification

Meaning:
Use of game elements in education.

Components:
- Points
- Badges
- Leaderboards
- Rewards

Benefits:
- Increased motivation
- Better participation
- Enhanced engagement

12 Massive Open Online Courses (MOOCs)

Meaning:
Large-scale online courses available to learners worldwide.

Examples:
- SWAYAM
- Coursera
- edX

Advantages:
- Affordable learning
- Global reach
- Lifelong education

13 Cloud-Based Learning

Meaning:
Use of cloud platforms for storing and sharing educational resources.

Examples:
- Google Drive
- OneDrive
- Dropbox

Benefits:
- Accessibility
- Collaboration
- Sepource sharing

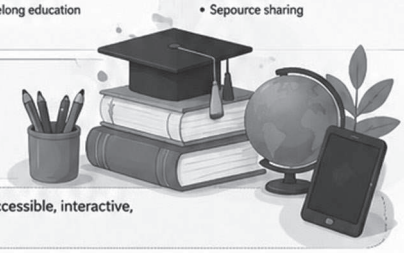
14 Adaptive Learning

Meaning:
Technology adjusts learning content according to learner performance.

15 Open Educational Resources (OER)

Meaning:
Freely available educational materials.

Exampits:
- E-books
- Lecture notes
- Open-access journals
- Educational videos



Key Takeaway

These technologies are transforming education by making it more accessible, interactive, personalized, engaging, and effective for learners across the globe.

- High-quality educational content.
- No internet required.
- Curriculum-based learning.

Benefits

- Reaches remote areas.
- Supports distance learning.
- Useful where internet access is limited.

3. MOOCs (Massive Open Online Courses)

MOOCs are online courses designed for large-scale participation and open access through the internet.

Characteristics

- Massive enrollment.
- Open access.
- Online delivery.
- Self-paced learning.

Examples

- SWAYAM
- Coursera
- edX
- FutureLearn
- Udacity

Advantages

- Global accessibility.
- Flexible learning.
- Lifelong education.
- Low cost.

Limitations

- Low completion rates.
- Limited personal interaction.
- Requires self-motivation.

4. NPTEL (National Programme on Technology Enhanced Learning)

Introduction

NPTEL is a joint initiative of the IITs and IISc funded by the Ministry of Education.

Objectives

- Improve technical education.
- Provide high-quality online courses.
- Enhance employability skills.

Features

- Video lectures.
- Online certification courses.
- Industry-oriented programs.
- Proctored examinations.

Areas Covered

- Engineering
- Technology
- Sciences
- Management
- Humanities

Advantages

- High-quality faculty.
- Nationally recognized certificates.
- Industry relevance.

NPTEL is developed primarily by **IITs and IISc**.

5. DIKSHA (Digital Infrastructure for Knowledge Sharing)

DIKSHA is a national digital platform developed by the Ministry of Education for teachers, students, and educational administrators.

Objectives

- Support school education.
- Provide teacher training.
- Offer digital learning resources.

Features

- E-content.
- QR-code enabled textbooks.
- Teacher training modules.
- Assessment tools.
- Multilingual content.

Users

- Teachers
- Students
- Parents
- School administrators

Advantages

- Easy access to learning resources.
- Supports teacher professional development.
- Available in multiple languages.

DIKSHA mainly supports **school education and teacher training**.

6. NDLI (National Digital Library of India)

NDLI is a virtual repository of learning resources developed

by IIT Kharagpur under the Ministry of Education.

Objectives

- Provide a single-window access to educational resources.
- Support learning and research.

Features

- E-books.
- Journals.
- Theses.
- Lecture videos.
- Research articles.

Advantages

- Free access.
- Multidisciplinary resources.
- Useful for students and researchers.

NDLI is developed by **IIT Kharagpur**.

7. e-PG Pathshala

Introduction

e-PG Pathshala is an initiative of UGC under the National Mission on Education through ICT (NMEICT).

Objectives

- Provide postgraduate-level learning resources.
- Enhance higher education quality.

Features

- E-text modules.
- Video lectures.
- Self-learning materials.
- Subject-wise content.

Target Users

- Postgraduate students.
- Researchers.
- Teachers.

e-PG Pathshala focuses on **Postgraduate Education**.

8. LMS (Learning Management System)

Software used to plan, deliver, manage, and evaluate educational programs.

Functions

- Course management.
- Assignment submission.
- Assessment.
- Attendance tracking.
- Progress monitoring.

Features

- Content delivery.
- Discussion forums.
- Online quizzes.
- Learning analytics.

Examples

- Moodle
- Canvas
- Blackboard
- Google Classroom

Advantages

- Organized learning.
- Continuous assessment.
- Personalized learning.

An LMS manages the entire teaching-learning process digitally.

9. Moodle

- Modular Object-Oriented Dynamic Learning Environment.
- Moodle is one of the most widely used open-source Learning Management Systems.

Features

- Course creation.
- Online assessment.
- Discussion forums.
- Assignment management.

Advantages

- Free and open-source.
- Highly customizable.
- Large user community.

Moodle is an **open-source LMS**.

10. Google Classroom

- Google Classroom is a cloud-based learning platform developed by Google.

Features

- Assignment management.
- Announcements.
- Google Drive integration.
- Online assessment.

Advantages

- User-friendly.

6 Educational Psychology

6.1 Educational psychology as a discipline.

6.2 Role of educational psychology - learning and teaching today.

6.3 Cognitive development: Brain and cognitive development.

6.4 Guidelines to teaching: Piaget's theory of cognitive development.

6.5 Vygotsky's Sociocultural perspective.

6.6 Bronfenbrenner's social context, Self and moral development.

6.1 EDUCATIONAL PSYCHOLOGY AS A DISCIPLINE

Educational Psychology is a specialized branch of psychology that applies psychological principles, theories, and research to the teaching-learning process. It studies how learners acquire knowledge, develop skills, respond to instruction, and interact within educational environments.

Educational psychology serves as the scientific foundation of education by helping teachers understand learners, improve teaching methods, manage classrooms effectively, and enhance learning outcomes.

Definitions of Educational Psychology

B.F. Skinner

"Educational psychology is the branch of psychology that deals with teaching and learning."

Crow and Crow

"Educational psychology describes and explains the learning experiences of an individual from birth through old age."

Charles E. Skinner

"Educational psychology is that branch of psychology which deals with the behavior of individuals in educational situations."

Peel

"Educational psychology is the science of education."

Meaning of Educational Psychology

Educational psychology is the scientific study of:

- Learning and teaching processes
- Learner behavior
- Human growth and development
- Motivation and intelligence
- Individual differences
- Classroom interaction
- Educational assessment

It bridges the gap between **psychology** and **education**.

Educational Psychology as a Discipline

A discipline is a branch of knowledge having its own principles, theories, methods, and scope of study.

Educational psychology is considered a discipline because it possesses:

Characteristic	Description
Scientific Basis	Uses systematic observation, experimentation, and research.
Theoretical Foundation	Based on learning, motivation, development, and personality theories.
Specialized Knowledge	Focuses specifically on teaching-learning processes.
Practical Application	Applies psychological principles in educational settings.
Research Orientation	Continuously develops through educational research.
Interdisciplinary Nature	Integrates psychology, education, sociology, neuroscience, and technology.

Nature of Educational Psychology

Educational psychology is:

1. **Scientific** – Based on evidence and research.

For Educational Institutions

- Improves curriculum planning
- Enhances assessment quality
- Supports educational reforms

Educational Psychology in Health Professions Education

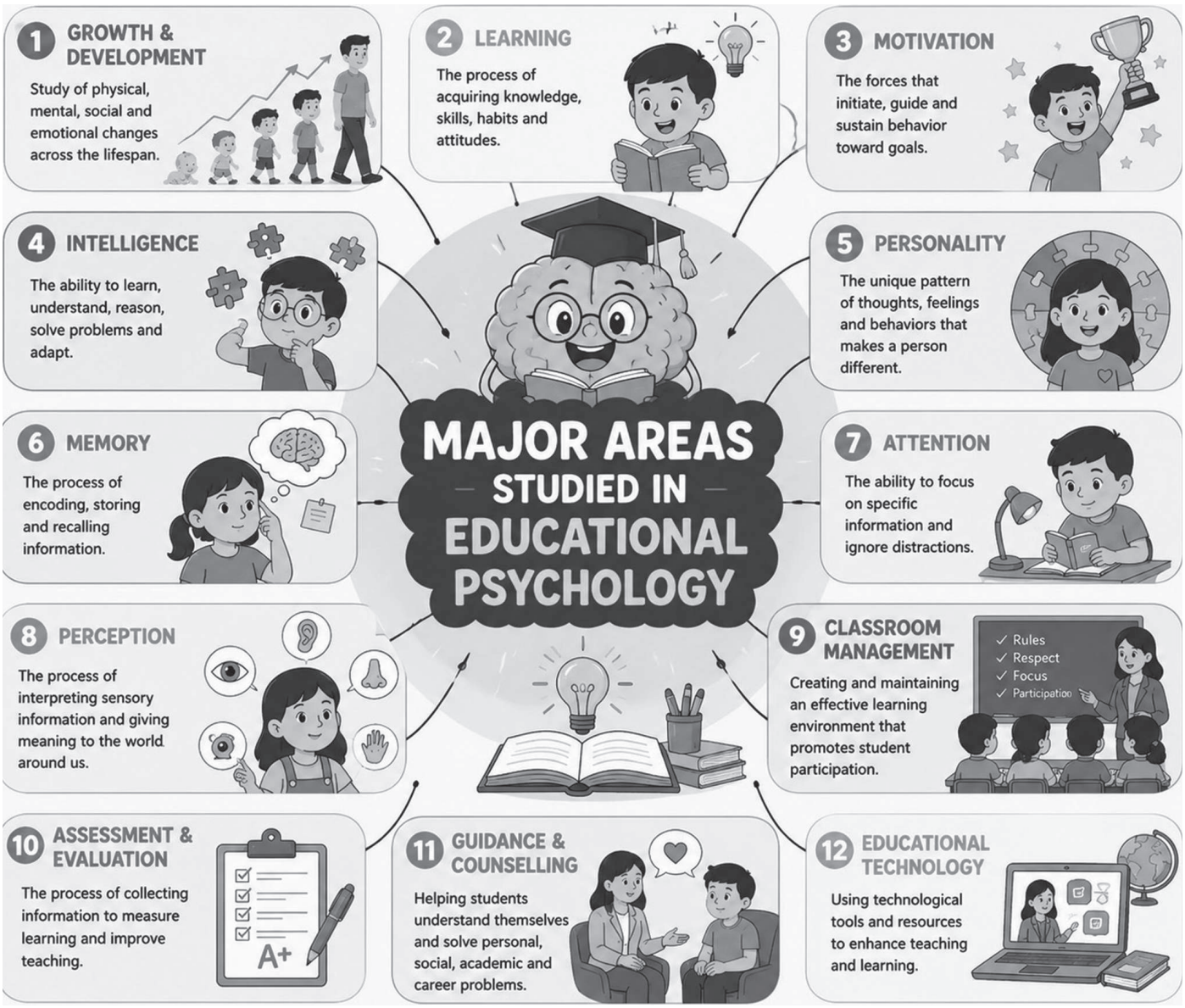
Educational psychology helps teachers in:

- Competency-Based Medical Education (CBME)
- Outcome-Based Education (OBE)
- Clinical teaching
- Skill laboratory training
- Simulation-based learning
- Student assessment
- Feedback and mentoring

Ayurveda Example

While teaching **Netra Roga**, an educator applies educational psychology by:

- Understanding learner readiness
- Using demonstrations and simulations
- Providing motivation and feedback
- Assessing competency through OSCE/skill assessment


MAJOR AREAS STUDIED IN EDUCATIONAL PSYCHOLOGY
1 GROWTH & DEVELOPMENT
Study of physical, mental, social and emotional changes across the lifespan.
2 LEARNING
The process of acquiring knowledge, skills, habits and attitudes.
3 MOTIVATION
The forces that initiate, guide and sustain behavior toward goals.
4 INTELLIGENCE
The ability to learn, understand, reason, solve problems and adapt.
5 PERSONALITY
The unique pattern of thoughts, feelings and behaviors that makes a person different.
6 MEMORY
The process of encoding, storing and recalling information.
7 ATTENTION
The ability to focus on specific information and ignore distractions.
8 PERCEPTION
The process of interpreting sensory information and giving meaning to the world around us.
9 CLASSROOM MANAGEMENT
Creating and maintaining an effective learning environment that promotes student participation.
✓ Rules
✓ Respect
✓ Focus
✓ Participation
10 ASSESSMENT & EVALUATION
The process of collecting information to measure learning and improve teaching.
A+
11 GUIDANCE & COUNSELLING
Helping students understand themselves and solve personal, social, academic and career problems.
12 EDUCATIONAL TECHNOLOGY
Using technological tools and resources to enhance teaching and learning.

VYGOTSKY'S SOCIOCULTURAL PERSPECTIVE

Cognitive development occurs through social interaction, language and culture.

MAJOR IDEAS

- Learning is a social process.
- Language is the most important tool of learning.
- Culture provides the tools and symbols for thinking.
- Learning precedes development.

KEY CONCEPTS

SOCIAL INTERACTION

Learning occurs through interaction with others (parents, teachers, peers, experts).

LANGUAGE

Language is the primary tool for thinking, communication and self-regulation.

CULTURE

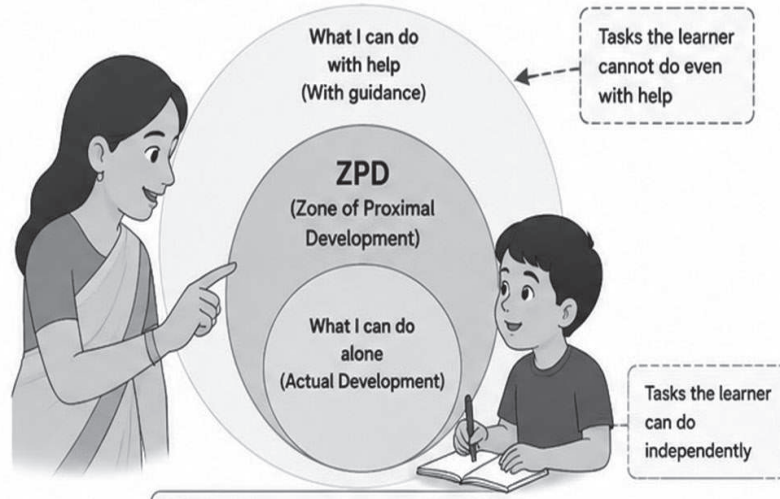
Culture provides values, beliefs, tools and practices that shape thinking and learning.

MORE KNOWLEDGABLE OTHER (MKO)

A person who has more knowledge or skill than the learner and helps in learning.

ZONE OF PROXIMAL DEVELOPMENT (ZPD)

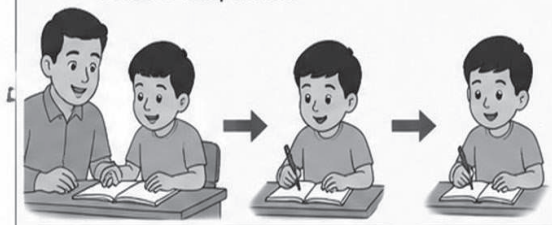
The distance between what a learner can do independently and what he/she can do with guidance or help.


What I can do with help (With guidance)
Tasks the learner cannot do even with help
ZPD (Zone of Proximal Development)
What I can do alone (Actual Development)
Tasks the learner can do independently

With guidance and support in the ZPD, the learner develops new abilities.

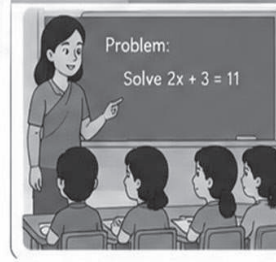
SCAFFOLDING

Temporary support given by the MKO to help the learner perform tasks in the ZPD.
Support is gradually reduced as the learner becomes independent.



High Support	Moderate Support	Low Support
(Teacher Models, Explains, Guides)	(Teacher gives hints, asks questions)	(Learner works independently)

EXAMPLE IN CLASSROOM



- Teacher helps the student understand the problem.
- Guides step by step.
- Gradually the student solves similar problems on his own.
- This is learning in the ZPD through scaffolding.

DEVELOPMENT OF SPEECH (INTERNALIZATION PROCESS)

Talking with others

Talking to oneself while solving a problem

Silent internal thinking or self talk

SUMMARY

- Learning is socially constructed.
- Language and culture are essential.
- ZPD shows the potential for learning.
- Scaffolding helps the learner achieve independence.
- Interaction with MKO promotes cognitive growth.

EDUCATIONAL IMPLICATIONS

Encourage cooperative and collaborative learning.

Use peer teaching and group discussions.

Provide guided learning and scaffolding.

Teach according to students' ZPD.

Create a language-rich environment.

Focus on interaction, participation and active engagement.

- Neuroplasticity continues throughout life.
- Lateralization refers to specialization of brain hemispheres.
- The frontal lobe controls planning and reasoning.
- The parietal lobe is responsible for sensory integration.
- The temporal lobe is associated with memory and language.
- The occipital lobe is responsible for vision.
- The cerebellum coordinates movement and motor learning.
- The hippocampus is essential for memory formation.
- The amygdala is involved in emotional processing.
- Attention is essential for learning.
- Memory is necessary for retention and recall.
- Executive functions are primarily controlled by the frontal lobe.
- Working memory is a component of executive function.
- Cognitive flexibility enables adaptation to new situations.
- Learning changes brain structure through neuroplasticity.

Piaget's Theory of Cognitive Development

- Jean Piaget proposed the theory of cognitive development.
- Piaget believed learners actively construct knowledge.
- Piaget emphasized learning through interaction with the environment.
- Cognitive development occurs through assimilation and accommodation.
- Schema is a mental framework for organizing knowledge.
- Assimilation incorporates new experiences into existing schemas.
- Accommodation modifies schemas based on new experiences.
- Equilibration balances assimilation and accommodation.
- Piaget proposed four stages of cognitive development.
- Sensorimotor stage occurs from birth to 2 years.
- Object permanence develops during the sensorimotor stage.
- Preoperational stage occurs from 2 to 7 years.
- Egocentrism is characteristic of the preoperational stage.
- Concrete operational stage occurs from 7 to 11 years.
- Logical thinking develops in the concrete operational stage.
- Formal operational stage begins around 11 years.
- Abstract reasoning develops during the formal operational stage.
- Piaget emphasized discovery learning.
- Learning should proceed from concrete to abstract.
- Active learning is central to Piaget's theory.
- Cognitive conflict promotes cognitive growth.
- Problem-solving enhances cognitive development.

Teaching Guidelines Based on Piaget

- Teaching should match the learner's developmental stage.
- Readiness is a fundamental principle of Piagetian teaching.
- Learning occurs best through active participation.
- Discovery learning promotes conceptual understanding.
- Concrete experiences should precede abstract concepts.
- Teachers should encourage exploration and experimentation.
- Problem-solving develops reasoning abilities.
- Social interaction supports learning.
- Cognitive conflict promotes accommodation.
- Questioning encourages higher-order thinking.
- Understanding is more important than memorization.
- Individual differences should be respected.
- Formal operational learners can understand hypothetical reasoning.
- Piaget's theory supports learner-centered education.

Vygotsky's Sociocultural Theory

- Lev Vygotsky proposed the Sociocultural Theory.
- Vygotsky emphasized social interaction in learning.
- Learning is influenced by culture and language.
- Learning precedes development according to Vygotsky.
- Language is the primary tool of cognitive development.
- Knowledge is constructed through collaboration.
- Social interaction promotes cognitive growth.
- Culture shapes thinking and learning.
- Social speech develops before private speech.
- Private speech develops before inner speech.
- Inner speech represents internal thinking.

Zone of Proximal Development (ZPD)

- ZPD is Vygotsky's most important concept.
- ZPD is the gap between independent and assisted performance.
- ZPD identifies a learner's potential development.
- Teaching should target the learner's ZPD.
- Learning is maximized within the ZPD.

7 Andragogy in Education

7.1 Meaning of Andragogy
7.2 Need and importance of Andragogy
7.3 Principles of Andragogy
7.4 Characteristics of Adult Learners
7.5 Competencies of Self-Directed Learning

7.1 MEANING OF ANDRAGOGY

Introduction

Education is not limited to children and adolescents. Adults also continue learning for personal growth, professional advancement, skill development, and social improvement. The methods used for teaching adults are different from those used for children. The science and art of helping adults learn is known as **Andragogy**.

The term gained popularity through the work of **Malcolm Knowles**, who emphasized that adult learners are self-directed, experienced, and goal-oriented.

Meaning of Andragogy

The word **Andragogy** is derived from Greek words:

- **Andra / Aner** = Man or Adult
- **Agogos** = Leading or Guiding

Thus, **Andragogy means the art and science of helping adults learn.**

It refers to the principles, methods, and practices specially designed for **adult education**.

Definition of Andragogy

Malcolm Knowles defined andragogy as:

> "The art and science of helping adults learn."

This concept explains that adults learn differently from children and therefore require different teaching approaches.

Simple Explanation

In simple words:

- **Pedagogy** = Teaching children
- **Andragogy** = Facilitating adult learning

Adults are not passive learners. They bring life experience, expect relevance, and prefer self-learning.

Characteristics of Andragogy

Andragogy recognizes that adult learners:

- Are self-directed
- Have previous life and work experiences
- Learn for practical purposes
- Need respect and autonomy
- Prefer problem-solving learning
- Want immediate usefulness of content
- Learn better through participation

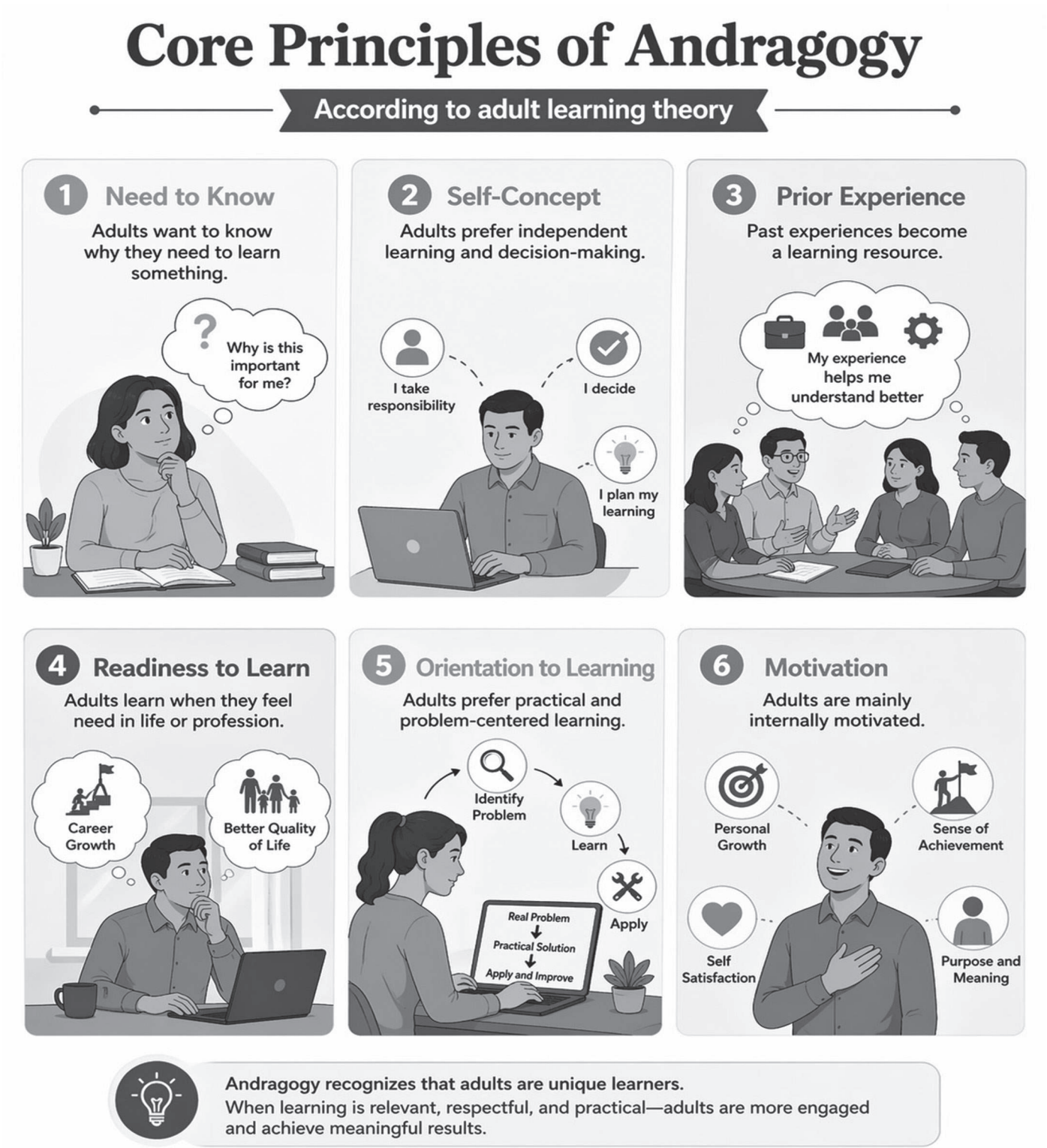
Core Principles of Andragogy

According to adult learning theory:

1. **Need to Know:** Adults want to know why they need to learn something.
2. **Self-Concept:** Adults prefer independent learning and decision-making.
3. **Prior Experience:** Past experiences become a learning resource.
4. **Readiness to Learn:** Adults learn when they feel needed in life or profession.
5. **Orientation to Learning:** Adults prefer practical and problem-centered learning.
6. **Motivation:** Adults are mainly internally motivated.

Examples of Andragogy

- A doctor attending CME program to update knowledge
- Teacher joining faculty development workshop
- Nurse learning ICU skill training
- Adult learning computer course for job promotion
- Ayurveda practitioner learning Panchakarma certification


Core Principles of Andragogy
According to adult learning theory
1 Need to Know
Adults want to know why they need to learn something.
Why is this important for me?
2 Self-Concept
Adults prefer independent learning and decision-making.
I take responsibility
I decide
I plan my learning
3 Prior Experience
Past experiences become a learning resource.
My experience helps me understand better
4 Readiness to Learn
Adults learn when they feel need in life or profession.
Career Growth
Better Quality of Life
5 Orientation to Learning
Adults prefer practical and problem-centered learning.
Identify Problem
Learn
Apply
Real Problem
Practical Solution
Apply and Improve
6 Motivation
Adults are mainly internally motivated.
Personal Growth
Sense of Achievement
Self Satisfaction
Purpose and Meaning
Andragogy recognizes that adults are unique learners.
When learning is relevant, respectful, and practical—adults are more engaged and achieve meaningful results.

Andragogy in Classroom Practice

Teacher should:

- Treat adults respectfully
- Use discussion methods
- Encourage experience sharing
- Use case studies
- Use flexible schedules
- Focus on practical application
- Allow self-paced learning

8 Learning and Pedagogy

8.1 Concepts of Pedagogy
8.2 Meaning of Pedagogy
8.3 Steps of Pedagogical Analysis
8.4 Concepts of Critical Pedagogy
8.5 Development of the concept of pedagogy
8.6 Need and importance of Pedagogy
8.7 Formulations of Learning Objectives, Teaching-Learning

8.1, 8.2 CONCEPTS AND MEANING OF PEDAGOGY

Meaning of Pedagogy

- The word **Pedagogy** comes from the Greek words:
- **Paidos** = Child
- **Agogos** = To lead or guide
- **Pedagogy** means the **art, science, and practice of teaching and educating learners**.
- It refers to the methods, principles, and techniques used by teachers to facilitate learning.

Definition

Pedagogy is the study and practice of how knowledge and skills are taught and learned.

Concepts of Pedagogy

Pedagogy is based on several important concepts:

a) Teaching-Learning Process

- Teaching and learning are interconnected.
- The teacher guides students to acquire knowledge, skills, attitudes, and values.

b) Learner-Centered Approach

- Focuses on the needs, interests, and abilities of learners.
- Encourages active participation and independent thinking.

c) Teacher as Facilitator

- The teacher does not merely transmit information.
- They create opportunities and environments that help students learn effectively.

d) Interaction

- Learning occurs through interaction between:
- Teacher and student
- Student and student
- Student and environment

e) Holistic Development

- Pedagogy aims at the development of:
- Cognitive domain (knowledge)
- Affective domain (attitudes and values)
- Psychomotor domain (skills)

f) Assessment and Feedback

- Continuous evaluation helps determine students' progress.
- Feedback improves learning and teaching effectiveness.

Characteristics of Pedagogy

- Systematic and planned process.
- Child-centered and activity-based.
- Promotes critical thinking and creativity.
- Encourages collaboration and communication.
- Adapts according to learners' needs and abilities.

- Involves continuous assessment and improvement.

Principles of Pedagogy

1. Learning by doing
2. From simple to complex
3. From known to unknown
4. From concrete to abstract
5. Individual differences should be respected
6. Active participation of learners
7. Motivation enhances learning
8. Reinforcement strengthens learning

Types of Pedagogy

Traditional Pedagogy

- Teacher-centered.
- Emphasis on memorization and lectures.

Constructivist Pedagogy

- Learners construct knowledge through experiences.
- Encourages inquiry and problem-solving.

Collaborative Pedagogy

- Learning through group activities and discussions.

Critical Pedagogy

- Promotes critical thinking and social awareness.

Experiential Pedagogy

- Learning through direct experience and reflection.

Importance of Pedagogy

- Makes teaching effective and systematic.
- Helps achieve educational objectives.
- Encourages meaningful learning.
- Develops critical thinking and creativity.
- Promotes overall personality development.
- Improves communication and problem-solving skills.

8.3 STEPS OF PEDAGOGICAL ANALYSIS

Pedagogical Analysis is the process of breaking down the content to be taught into smaller components and organizing them systematically to facilitate effective teaching and learning.

Steps of Pedagogical Analysis

1. Selection of Content

- Select the topic or unit to be taught.
- Ensure that the content is relevant to the curriculum and learners' needs.

2. Identification of Objectives

- Specify the learning outcomes to be achieved.
- Objectives should cover:
  - **Cognitive domain** (knowledge)
  - **Affective domain** (attitude)
  - **Psychomotor domain** (skills)

3. Analysis of Content

- Divide the content into major concepts, sub-concepts, facts, principles, and skills.
- Arrange them in a logical sequence from simple to complex.

4. Identification of Entry Behaviour

- Assess learners' previous knowledge and experiences related to the topic.
- Determine the prerequisites needed for learning.

5. Selection of Teaching Methods and Strategies

- Choose suitable teaching methods such as:
  - Lecture
  - Discussion
  - Demonstration
  - Problem-solving
  - Activity-based learning

6. Selection of Learning Experiences and Teaching Aids

- Provide activities and experiences that promote learning.
- Use appropriate instructional materials like charts, models, videos, and multimedia.

7. Organization and Sequencing of Content

- Arrange concepts in a meaningful order:
  - Known to unknown
  - Simple to complex
  - Concrete to abstract

8. Evaluation

- Assess whether the objectives have been achieved.
- Use tests, assignments, observations, and feedback to evaluate learning outcomes.

NEP 2020

Introduction

The National Education Policy 2020 is the first education policy of the 21st century in India. It replaced the National Policy on Education, 1986. NEP 2020 aims to transform India into a global knowledge superpower by making education holistic, flexible, multidisciplinary, skill-based, inclusive, and learner-centred.

Foundational Pillars of NEP 2020

Pillar	Meaning
Access	Education should be available to all
Equity	Equal opportunity for all learners
Quality	Improvement in teaching-learning standards
Affordability	Education should remain financially accessible
Accountability	Institutions and teachers must be responsible for outcomes

Vision of NEP 2020

Area	Vision
Learner	Holistic development of every learner
Education system	Flexible, multidisciplinary and skill-based
Teacher	Teacher as facilitator, mentor and guide
Curriculum	Competency-based and outcome-oriented
Assessment	Conceptual understanding instead of rote learning
India	Global knowledge superpower

Major Features of NEP 2020

No.	Feature	Explanation	NTET High-Yield Point
1	New school structure	5+3+3+4 curricular structure	Replaces 10+2 structure
2	Foundational literacy	Focus on basic reading, writing and numeracy	Highest priority
3	Mother tongue	Medium of instruction preferably in mother tongue/ local language till Grade 5	Multilingual education
4	Holistic education	Focus on cognitive, social, emotional, ethical and physical development	Overall development
5	Multidisciplinary learning	Removal of rigid separation between arts, science and commerce	Flexible curriculum
6	Vocational education	Skill-based education from early stage	Employability
7	Experiential learning	Learning by doing, projects, activities and field work	Active learning
8	Competency-based education	Focus on actual learning outcomes	Outcome-based education
9	Assessment reform	Less rote memorization, more conceptual testing	Competency assessment
10	Teacher education	Minimum 4-year integrated B.Ed. proposed as standard qualification	Teacher quality
11	Higher education reform	Multidisciplinary universities and colleges	Holistic higher education
12	Multiple entry-exit	Flexible entry and exit in higher education	Academic flexibility
13	Academic Bank of Credit	Digital storage of academic credits	Credit transfer

MISCELLANEOUS

PART-1: COMPARISON TABLES

1. PEDAGOGY vs ANDRAGOGY

Aspect	Pedagogy	Andragogy
Meaning	Art and science of teaching children	Art and science of helping adults learn
Learner	Child	Adult
Developed by	Traditional educational theory	Malcolm Knowles
Teacher's Role	Instructor	Facilitator
Learning Style	Teacher-directed	Self-directed
Experience	Limited	Rich prior experience
Motivation	External	Internal
Readiness to Learn	Age-based	Need-based
Learning Orientation	Subject-centered	Problem-centered
Assessment	Teacher-controlled	Self and peer evaluation
Examples	School education	Medical education, CME, Faculty development

High-Yield Points

- Malcolm Knowles is regarded as the Father of Andragogy.
- NTET focuses predominantly on adult learning principles because Ayurveda education is delivered to adult learners.

2. MEASUREMENT vs ASSESSMENT vs EVALUATION

Measurement	Assessment	Evaluation
Quantifies performance	Collects information	Makes judgment
Numerical	Qualitative + Quantitative	Decision making
Marks obtained	Learning progress	Overall achievement
Objective	Comprehensive	Final interpretation

Example

Measurement:

Student scored **75/100**

↓

Assessment:
Student performs well in theory but poorly in communication.

↓

Evaluation:
Student has achieved competency and passed the course.
Remember: Measurement → Assessment → Evaluation

3. TEACHING vs TRAINING

Teaching	Training
Knowledge-oriented	Skill-oriented
Broad understanding	Specific performance
Conceptual	Practical
Long-term	Immediate
Classroom	Skill laboratory
Example	Teaching anatomy

4. GUIDANCE vs COUNSELLING

Guidance	Counselling
Preventive	Remedial
Advice	Professional assistance
General	Individualized
Educational focus	Emotional & psychological focus
One-way	Interactive

5. CURRICULUM vs SYLLABUS

Curriculum	Syllabus
Overall educational plan	Content of a subject
Broad	Narrow
Includes objectives, teaching, assessment	Includes topics only
Long-term	Course-specific

6. LEARNING OBJECTIVE vs LEARNING OUTCOME

Learning Objective	Learning Outcome
Intended before teaching	Achieved after learning

Multiple Choice Questions (MCQs)

PAPER-1: TEACHING AND TRAINING

1. **Teaching is best described as:**

   A. Transfer of information only

   B. A process of facilitating learning through planned experiences

   C. Memorization of facts

   D. Classroom lecturing

   Answer: B

2. **Which of the following is NOT a component of teaching?**

   A. Teacher

   B. Learner

   C. Learning Environment

   D. Examination Board

   Answer: D

3. **Lesson planning is mainly performed during which phase of teaching?**

   A. Interactive Phase B. Post-active Phase

   C. Pre-active Phase D. Reflective Phase

   Answer: C

4. **Morrison is associated with:**

   A. Reflective Level Teaching

   B. Memory Level Teaching

   C. Understanding Level Teaching

   D. Cognitive Domain

   Answer: C

5. **Which teaching principle emphasizes connecting classroom learning with real-life situations?**

   A. Principle of Planning

   B. Principle of Linking with Life

   C. Principle of Division

   D. Principle of Selection

   Answer: B

6. **The highest level of teaching according to educational psychology is:**

   A. Memory Level B. Understanding Level

   C. Reflective Level D. Cognitive Level

   Answer: C

7. **A teacher asks students to design a research proposal on Nasya Karma. Which teaching principle is primarily being utilized?**

   A. Reinforcement B. Motivation

   C. Creativity D. Revision

   Answer: C

8. **In Gagné's Nine Events of Instruction, allowing students to perform facial nerve examination corresponds to:**

   A. Provide Learning Guidance

   B. Assess Performance

   C. Elicit Performance

   D. Enhance Retention

   Answer: C

9. **Which psychomotor level in Dave's model represents accurate and error-free performance?**

   A. Manipulation B. Articulation

   C. Precision D. Naturalization

   Answer: C

10. **A teacher demonstrates Nadi Pariksha and students observe sensory cues before performing it. According to Simpson's model, this represents:**

    A. Adaptation B. Perception

    C. Mechanism D. Origination

    Answer: B

11. **Which characteristic distinguishes Reflective Level Teaching from Understanding Level Teaching?**

    A. Teacher-centered approach

    B. Focus on recall

    C. Independent judgment and problem-solving

    D. One-way communication

    Answer: C

12. **Which of the following best represents Outcome-Based Education (OBE)?**

    A. Teaching according to textbook chapters

102.Providing extra sessions for students struggling with clinical examination skills represents:

A. Democratic Dealing

B. Remedial Teaching

C. Recreation

D. Reinforcement

Answer: B

103.A highly knowledgeable teacher fails to communicate concepts clearly. Which teacher-related factor is deficient?

A. Subject Knowledge

B. Professional Development

C. Communication Ability

D. Motivation

Answer: C

104.A student is unable to understand advanced pathology because prerequisite concepts are weak. Which learner-related factor is mainly responsible?

A. Previous Knowledge

B. Physical Health

C. Age

D. Attendance

Answer: A

105.Which clinical teaching method primarily develops organized clinical thinking and presentation skills?

A. Case Presentation

B. Ward Round

C. Observation Method

D. Simulation

Answer: A

106.Teaching conducted during outpatient consultations is called:

A. Bedside Teaching

B. OPD Teaching

C. Seminar Teaching

D. Tutorial Teaching

Answer: B

107.Which clinical teaching method is particularly useful for learning patient progress monitoring and treatment modification?

A. Case Presentation

B. Ward Round Teaching

C. Demonstration

D. Simulation

Answer: B

108.In Gagné's model, asking questions about Vata Dosha before teaching Ardita corresponds to:

A. Gain Attention

B. Present Content

C. Stimulate Recall of Prior Learning

D. Assess Performance

Answer: C

109.Conducting an OSCE after a teaching session corresponds to which event of Gagné?

A. Elicit Performance

B. Assess Performance

C. Provide Feedback

D. Enhance Retention

Answer: B

110.Which of the following combinations is correctly matched?

A. Memory Level – Critical Thinking

B. Understanding Level – Recall Only

C. Reflective Level – Independent Judgment

D. Memory Level – Research Attitude

Answer: C

PAPER-2 COMMUNICATION

1. **A teacher explains a topic clearly, but students interpret it differently because of ambiguous terminology. The barrier involved is:**

A. Psychological Barrier

B. Semantic Barrier

C. Organizational Barrier

D. Personal Barrier

Answer: B

2. **In Berlo's SMCR model, which component is MOST influenced by communication skills, attitudes, knowledge, social system, and culture?**

A. Message B. Channel

C. Source D. Feedback

Answer: C

3. **An anatomy professor directly communicates with the accounts officer of the finance department regarding procurement of teaching models. The communication is:**

A. Horizontal Communication

B. Upward Communication

99. **A teacher receives no questions after explaining a difficult topic. Which conclusion is MOST appropriate?**

A. Learning definitely occurred.

B. Communication was certainly effective.

C. Additional feedback is needed to verify understanding.

D. Students fully understood the topic.

Answer: C

100. **Which statement BEST summarizes the role of communication in education and healthcare?**

A. Communication is useful but secondary to technical expertise.

B. Communication primarily transfers information.

C. Communication creates understanding, trust, participation, and effective outcomes.

D. Communication is mainly administrative in nature.

Answer: C

PAPER-3 :CLASSROOM MANAGEMENT

1. **Which component of classroom management is primarily concerned with lesson planning, classroom activities, and assessment?**

A. Student Management

B. Time Management

C. Instructional Management

D. Behavior Management

Answer: C

2. **A teacher modifies seating arrangements to improve interaction and visibility. This primarily addresses:**

A. Instructional Management

B. Physical Environment

C. Student Management

D. Behavioral Management

Answer: B

3. **Which principle of classroom management is most directly related to preventing student confusion?**

A. Fairness

B. Clear Rules and Expectations

C. Positive Reinforcement

D. Mutual Respect

Answer: B

4. **In practical classroom management, which activity should occur FIRST?**

A. Evaluation

B. Demonstration

C. Defining learning objectives

D. Feedback

Answer: C

5. **The MOST important principle during practical sessions is:**

A. Student Autonomy

B. Group Learning

C. Safety First

D. Continuous Assessment

Answer: C

6. **Consider the following regarding classroom management:**

1. It includes behavioral management.
2. It includes instructional management.
3. It focuses only on discipline.
4. It includes time management.

A. 1, 2 and 4 only

B. 1 and 3 only

C. 2 and 3 only

D. All are correct

Answer: A

7. **Which of the following statements regarding practical classroom management are correct?**

1. Demonstration should precede practice.
2. Safety measures are essential.
3. Feedback improves skill acquisition.
4. Evaluation is unnecessary if practice is adequate.

A. 1 and 2 only

B. 2 and 3 only

C. 1, 2 and 3 only

D. All are correct

Answer: C

8. **Consider the following:**

1. Positive reinforcement promotes desirable behavior.
2. Punishment increases desired behavior.
3. Motivation influences learning.
4. Teacher modeling influences student behavior.

A. 1, 3 and 4 only

99. **Which assessment approach best supports lifelong learning?**

A. High-Stakes Summative Assessment

B. Reflective Portfolio-Based Assessment

C. Relative Grading

D. Single Final Examination

Answer: B

100. **Which statement best summarizes contemporary assessment philosophy in health professions education?**

A. Assessment should primarily rank learners.

B. Assessment should focus on certification alone.

C. Assessment should continuously support learning, competence, and professional development.

D. Assessment should be examination-centered.

Answer: C

CHAPTER-5 : EDUCATIONAL TECHNOLOGIES

1. **According to AECT, Educational Technology is primarily concerned with:**

A. Teaching through computers only

B. Facilitating learning and improving performance

C. Replacing teachers with technology

D. Digital content development only

Answer: B

2. **Which generation of educational technology introduced Internet and E-learning?**

A. Third

B. Fourth

C. Fifth

D. Sixth

Answer: B

3. **Artificial Intelligence, Virtual Reality and Learning Analytics belong to:**

A. Fourth Generation

B. Fifth Generation

C. Sixth Generation

D. Third Generation

Answer: C

4. **Which educational technology is MOST associated with immersive learning?**

A. LMS

B. Learning Analytics

C. Virtual Reality

D. Cloud Computing

Answer: C

5. **Learning Analytics primarily involves:**

A. Course delivery

B. Student grading

C. Collection and analysis of learner data

D. Content creation

Answer: C

6. **Consider the following regarding Educational Technology:**

1. It improves teaching effectiveness.

2. It supports personalized learning.

3. It facilitates lifelong learning.

4. It is limited to computer-based learning.

A. 1, 2 and 3 only

B. 1 and 4 only

C. 2 and 4 only

D. All are correct

Answer: A

7. **Which of the following are objectives of educational technology?**

1. Improve assessment

2. Enhance engagement

3. Support self-directed learning

4. Expand access to education

A. 1 and 2 only

B. 2 and 3 only

C. 1, 2, 3 and 4

D. 1, 3 and 4 only

Answer: C

8. **Assertion (A):** Learning Analytics is becoming increasingly important in higher education.

Reason (R): Learner data can be used to predict performance and identify learning gaps.

A. Both A and R are true and R correctly explains A

B. Both A and R are true but R is not the explanation

C. A is true but R is false

D. A is false but R is true

Answer: A

100. **Which statement best reflects the future direction of educational technology?**

A. Technology will replace pedagogy.

B. Education will become entirely virtual.

C. AI, analytics, immersive technologies, and personalization will increasingly support learning.

D. Traditional methods will disappear completely.

Answer: C

CHAPTER 6 : EDUCATIONAL PSYCHOLOGY

1. **Which statement best describes the primary objective of Educational Psychology?**

A. To study mental disorders in educational institutions

B. To apply psychological principles to improve teaching and learning

C. To develop educational policies only

D. To assess intelligence through standardized tests only

Answer: B

2. **Educational Psychology is considered an interdisciplinary discipline because it integrates knowledge from:**

A. Psychology, Education, Sociology, Neuroscience, and Technology

B. Medicine and Pharmacy only

C. Sociology and Anthropology only

D. Psychology alone

Answer: A

3. **Which characteristic distinguishes Educational Psychology from General Psychology?**

A. It studies all aspects of human behaviour.

B. It focuses exclusively on personality disorders.

C. It applies psychological principles specifically to educational situations.

D. It is limited to intelligence testing.

Answer: C

4. **According to Crow and Crow, Educational Psychology primarily explains:**

A. Classroom discipline only

B. Learning experiences from birth through old age

C. Intelligence testing methods

D. Educational administration

Answer: B

5. **Which education psychologist defined Educational Psychology as dealing with human behaviour in educational situations?**

A. Jean Piaget

B. B. F. Skinner

C. Edward Thorndike

D. Lev Vygotsky

Answer: B

6. **Peel described Educational Psychology as:**

A. Science of Behaviour

B. Science of Education

C. Science of Learning

D. Science of Development

Answer: B

7. **Charles E. Skinner emphasized Educational Psychology as the study of:**

A. Motivation in adults

B. Behaviour of individuals in educational situations

C. Curriculum development

D. Educational technology

Answer: B

8. **Which of the following is NOT considered a characteristic of Educational Psychology?**

A. Scientific

B. Interdisciplinary

C. Learner-centred

D. Dogmatic

Answer: D

9. **The major components of Educational Psychology include:**

A. Learner, Learning Process, Teaching Process, Learning Environment

B. Teacher, Examination, Administration, Curriculum

C. Learning, Intelligence, Personality, Sociology

D. Teaching, Behaviour, Research, Assessment

Answer: A

10. **Educational Psychology mainly bridges the gap between:**

A. Sociology and Philosophy

B. Psychology and Education

C. Biology and Medicine

D. Technology and Management

Answer: B

243. Which educational outcome best reflects successful cognitive development?

A. Ability to recall isolated facts

B. Ability to analyse, synthesize, and solve complex problems

C. Ability to copy textbook material

D. Ability to reproduce lecture notes

Answer: B

244. Which theory best supports collaborative learning?

A. Vygotsky's Sociocultural Theory

B. Pavlov's Classical Conditioning

C. Thorndike's Connectionism

D. Hull's Drive Reduction Theory

Answer: A

245. Which educational strategy best promotes transfer of learning?

A. Authentic clinical case discussions

B. Memorization without application

C. Isolated factual recall

D. Repeated copying

Answer: A

246. Which educational principle best supports competency-based assessment?

A. Feedback-driven improvement

B. Relative grading only

C. Norm-based ranking

D. One-time assessment

Answer: A

247. Which characteristic best defines an effective medical educator according to Educational Psychology?

A. Subject expertise alone

B. Ability to facilitate learning, motivate students, provide feedback, and support development

C. Strict discipline only

D. High research output alone

Answer: B

248. Which educational principle most strongly supports lifelong professional competence?

A. Continuous learning and reflection

B. Single qualifying examination

C. Memorization of facts

D. Teacher-centred instruction

Answer: A

249. Which educational theory provides the strongest foundation for modern CBME?

A. Behaviourism alone

B. Constructivism integrated with Social Constructivism

C. Psychoanalysis

D. Maturation Theory

Answer: B

250. Which statement BEST summarizes Educational Psychology in Health Professions Education?

A. Learning is primarily determined by intelligence.

B. Effective learning results from the interaction of cognitive development, social learning, supportive environments, self-belief, ethical reasoning, active participation, and meaningful feedback.

C. Clinical competence develops only through repeated examinations.

D. Teaching is more important than learning.

Answer: B

CHAPTER-7 : ANDRAGOGY IN EDUCATION

1. **The term *Andragogy* refers to:**

A. The science of educational administration

B. The art and science of helping adults learn

C. The scientific study of child behaviour

D. The philosophy of curriculum development

Answer: B

2. **The word *Andragogy* is derived from the Greek words *Andra* (adult) and *Agogos*, meaning:**

A. Teaching

B. Learning

C. Guiding or Leading

D. Knowledge

Answer: C

3. **Malcolm Knowles is internationally recognized for:**

A. Developing Bloom's Taxonomy

B. Popularizing the concept of Andragogy

C. Introducing Competency-Based Education

D. Proposing Constructivism

Answer: B

PREVIOUS YEAR QUESTION PAPERS

NTET-2024

1. **Match List I with List II**

   (A) Important unit of Mass media (I) Socialising people

   (B) Barrier of Communication (II) Promotes disturbances

   (C) Function of Mass media (III) All India Radio/ Television

   (D) Negative effect of mass media (IV) Incomplete message

   Choose the correct answer from the options given below:

   A. (A)- III, (B)- II, (C) - IV, (D)- I

   B. (A)- I, (B)- III, (C) - II, (D)- IV

   C. (A)- IV, (B)- II, (C) - I, (D)- III

   D. (A)- III, (B)- IV, (C) - I, (D)- II

2. **Given below are two statements:** One is labelled as Assertion and the other is labelled as Reason:

   Assertion: Adult learners bring prior knowledge and experiences to the learning situation.

   Reason: MAny adult learners move laterally in their career to learn new skills/ gain knowledge in an emerging field related to their current career.

   Choose the most appropriate answer from the options given below:

   A. Both (A) and (R) are correct and (R) is the correct explanation of (A)

   B. Both (A) and (R) are correct but (R) is not the correct explanation of (A)

   C. (A) is correct but (R) is not correct

   D. (A) is not correct but (R) is correct

3. **In a class of 25 adult learners, Mr. Mehta has low vision. What arrangements can be made in the classroom so that he is benefited?**

   A. He should be given an option to leave the course

   B. He should be given a seat in the front

   C. He should be made to sit as per his choice

   D. His vision should be tested

4. **Arrange the following in proper sequence for test preparation:**

   A. Defining the purpose of the test

   B. Finalising the test

   C. Writing the learning outcomes

   D. Writing the test item

   E. Tryout the items

   Choose the correct answer:

   A. A, B, C, D, E

   B. A, C, D, B, E

   C. A, C, D, E, B

   D. E, D, C, B, A

5. **Which of the following is not related to the psychological attribute of Intelligence:**

   A. Reasoning

   B. Judging

   C. Understanding

   D. Feeling

6. **Given below are two statements:** One is labelled as Assertion and the other is labelled as Reason:

   Assertion: Use of ICT makes teaching- learning and assessment easy and innovative.

   Reason: ICT includes both hardware and software technologies.

   Choose the most appropriate answer from the options given below:

   A. Both (A) and (R) are correct and (R) is the correct explanation of (A)

   B. Both (A) and (R) are correct but (R) is not the correct explanation of (A)

   C. (A) is correct but (R) is not correct

   D. (A) is not correct but (R) is correct

7. **What is not learner centered method?**

NTET-2025

1. **Who defined the term self-concept as- 'The totality of attitudes, judgement and values of an individual relating to his behavior, abilities and qualities may be referred to as his self-concept'.**

   A. H. J. Eysenk

   B. Hurlock

   C. Skinner

   D. Thorndike

2. **Who said Classroom Management is "the actions and strategies teachers use to solve the problem of order in classroom"?**

   A. Martin and Baldwin

   B. Doyle

   C. Walter

   D. Sokal, Smith, and Mowat

3. **Match List - I with List - II:**

   List - I (Teaching Method) | List - II (Advantage)

   A. Lecture | I. Scientific Thinking among learners

   B. Demonstration | II. It is based on purposeful activity

   C. Team Teaching | III. Teacher Control

   D. Problem Solving | IV. Need-centered

   Choose the correct answer from the options given below:

   A. A-III, B-I, C-IV, D-II

   B. A-I, B-III, C-II, D-IV

   C. A-IV, B-II, C-I, D-III

   D. A-III, B-IV, C-II, D-I

4. **Identify the fact, which is not associated with physical barrier of communication.**

   A. Noise at the time of oral communication.

   B. Lack of proper lighting at the time of written or non-verbal communication.

   C. Fatigue or staleness on part of the receiver.

   D. Very rigid and based on strict disciplinary rules of the institution.

5. **Which of the following is an important component for generating required number of question papers for On-Demand Examination System?**

   A. Question bank

   B. Study Material

   C. Books

   D. Student Enrolment

6. **Which of following is/are the characteristics of Vygotsky's sociocultural Theory?**

   A. Learning occurs through social interaction and collaboration.

   B. The Zone of Proximal development is a crucial concept.

   C. Cognitive development is primarily determined by individual factors.

   D. Language plays a Central role in thinking.

   Choose the correct answer from the options given below:

   A, B and C Only

   B, C and D Only

   A, B and D Only

   A and D Only

7. **Schema Theory in psychology is primarily associated with the work of which psychologist?**

   A. Frederic Bartlett

   B. Vygotsky

   C. Bronfenbrenner

   D. Jean Piaget

   E. Robert Sears

   Choose the correct answer from the options given below:

   A. C and E Only

   B. A and D Only

   C. D and E Only

   D. B and D Only

8. **What is not associated with teaching as a science?**

   A. Formulating Learning outcomes

   B. Fixed Assessment Pattern

   C. Pre decided Teaching Learning Material

   D. Teacher's freedom to deliver the content

9. **According to Piaget, the child moves from one stage to the next in a/an:**

   A. Unestablished Pattern

   B. Spiral Pattern

   C. Non-linear Pattern

   D. Established Pattern

4. Online Quiz

48. **Arrange the basic steps of Miller's Hierarchical Framework for Clinical Competence as per theoretical framework:**

A. Know how

B. Do

C. Show how

D. Know

Choose the correct answer:

1. D, A, C, B
2. B, D, C, A
3. D, A, B, C
4. A, C, D, B

49. **Which one of the following is NOT related to formative Evaluation?**

1. Its purpose is to know the progress of learning
2. It is aimed to provide feedback to the learners for further study
3. It provides remediation for further development
4. Its objectives are related to the topics taught

50. **Which of the following assessment practices best illustrate the principles of both, Formative and Summative assessment?**

A. Providing continuous feedback during the lecturing sessions

B. Conducting of final examination at the end of the course

C. Using assessment only for grading purposes without feedback

D. Discussing learning gaps and modifying instruction accordingly

E. Assessing grades without sharing performance criteria

Choose the correct answer:

1. A and E only
2. A, B and D only
3. B and C only
4. A, D and E only

51. **Which of the following characteristics are associated with Objective Structured Clinical Examination?**

A. Multiple stations assessing different skills

B. High subjectivity in scoring

C. Standardized checklist for evaluation

D. Long unstructured practical case discussion

E. Focus on practical and clinical skills

Choose the correct answer:

1. A and D only
2. A, B and D only
3. B and C only
4. A, C and E only

52. **Which of the following assessment practices demonstrate the effective use of feedback in the assessment?**

A. Providing timely and specific feedback

B. Giving only marks without comments

C. Encouraging self-reflection among learners

D. Delaying feedback until course completion

E. Using feedback to improve learning

Choose the correct answer:

1. A, C and E only
2. A, B and D only
3. B and C only
4. A, D and E only

53. **Match List I with List II:**

List I	**List II**
A. Placement evaluation	I. To certify the learner
B. Diagnostic evaluation	II. To know mastery in content
C. Formative evaluation	III. Identify learning difficulties
D. Summative evaluation	IV. To know entry behavior

Choose the correct answer:

1. A-II, B-IV, C-I, D-III
2. A-III, B-IV, C-I, D-II
3. A-I, B-III, C-II, D-IV
4. A-IV, B-III, C-II, D-I

54. **Match List I with List II:**

List I	**List II**
A. Micro Teaching	I. To fit the mini lesson in the real teaching programme
B. Multisource feedback (MSF)	II. Scaled down teaching encounter
C. Mini Teaching	III. Process of assessment planning
D. Blueprinting	IV. 360 degree feedback

Choose the correct answer:

1. A-II, B-IV, C-I, D-III
2. A-III, B-II, C-I, D-IV
3. A-II, B-I, C-III, D-IV
4. A-IV, B-II, C-I, D-III

55. **Match List I with List II:**

List I	List II
A. Validity	I. It is accepted as being credible to relevant stakeholders
B. Educational effect	II. A body of evidence that supports the use of assessment results
C. Acceptability	III. The assessment provides feedback to support, enhance and drive future learning
D. Catalytic effect	IV. It motivates in a way that is academically beneficial

Choose the correct answer:

1. A-II, B-IV, C-I, D-III
2. A-IV, B-I, C-II, D-III
3. A-IV, B-I, C-III, D-II
4. A-III, B-I, C-IV, D-II

56. **What is the central concern of Educational Technology?**

1. Enhancing Media Literacy
2. Enhancing Pedagogical Effectiveness
3. Restricting students' autonomy
4. Developing Content Literacy

57. **The TPACK stands for:**

1. Teaching-Pedagogy and Curriculum Knowledge
2. Teaching-Pedagogy and Content Knowledge
3. Technology-Pedagogy and Curriculum Knowledge
4. Technological Pedagogical and Content Knowledge

58. **Which technology allows machines/computers or robotics systems to process information the way humans would?**

1. Cloud Computing
2. Artificial Intelligence
3. Big data
4. Blockchain

59. **The National Repository of Open Educational Resources (NROER) was developed by:**

1. NCERT
2. NIEPA
3. NITTTR
4. NPTEL

60. **Network that connects the computers spread in very large area is called:**

1. LAN
2. WAN
3. PAN
4. INTERNET

61. **Arrange the following licensing pattern for Open Educational Resources (OER) from most restricted to most accommodating under Creative Commons:**

A. CC-BY-NC-ND
B. CC-BY-ND
C. CC-BY-NC
D. CC-BY-NC-SA
E. CC-BY-SA

Choose the correct answer:

1. B, A, C, D, E
2. A, D, B, C, E
3. A, B, C, D, E
4. D, A, B, E, C

62. **Arrange the following according to increasing its size:**

A. Tera Byte
B. Exa Byte
C. Peta Byte
D. Zeta Byte
E. Giga Byte

Choose the correct answer:

1. E, A, C, D, B
2. A, E, B, C, D
3. E, A, C, B, D
4. D, A, B, E, C

63. **Which of the following are NOT Learner-Centered Methods?**

A. Project Work
B. Lecture
C. Field Visit
D. Teacher's Demonstration
E. Self-Learning Packages

Choose the correct answer from the options given below:

1. A and D only
2. B and E only
3. A, C and E only
4. B and D only

64. **Which educational initiatives are developed by IIT, Bombay?**

A. OSCAR
B. NROER
C. FOSSEE
D. A-VIEW
E. SWAYAM

Choose the correct answer from the options given below:

1. A and E only
2. A and C only
3. A, B and E only
4. B and D only